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Vol. IX.

of the

Botanists Repository

Comprising,

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

Linnæan System.

by

H. Andrews

Botanical Painter Engraver &c.

Mo. Bot. Garden
1904.

PLATE DLIII.

LOBELIA ASSURGENS.

Assurgent Lobelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX quinquefidus. Corolla monopetala, irregularis. Antheræ cohærentes. Capsula infera, 2- seu 3-locularis.

EMPALEMENT five-cleft. Blossom of one petal, irregular. Anthers cohering. Seed-vessel below, with 2 or 3 partitions.

SPECIFIC CHARACTER.

LOBELIA foliis lanceolatis serratis, infernè denticulatis decurrentibus, racemis compositis terminalibus.

LOBELIA with leaves lance-shaped, serrate, toothed towards the base, and running down the stem; the racemes compound and terminal.

REFERENCE TO THE PLATE.

1. A blossom spread open.
2. The chives spread open.
3. The seed-bud and pointal.

THIS curious species of Lobelia is a native of high mountains in Jamaica, where Brown informs us it grows to the height of 5 or 6 feet. The plant is at present so scarce as not to be enumerated in the Catalogue of the Cambridge Garden; nor has any figure of it, to our knowledge, been before published. Specimens were communicated by A. B. Lambert, esq. from his stove at Boyton, where he informs us that the plant is now about five feet high, with some of the lower leaves a foot and a half long; that it began to blossom in the middle of July, and continued to the end of November; four or five racemes flowering at the same time, and nodding in the manner of ostrich plumes; the blossoms gradually opening in succession towards the top, and the racemes continuing to lengthen until more than a foot long. The flowers have withered without producing any seed. The plant appears to be perennial.

MISSOURI BOTANICAL
GARDEN LIBRARY

Lobelia. afpurgens

PLATE DLIV.

VOLKAMERIA ANGUSTIFOLIA.

Narrow-leaved Volkameria.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX quinquefidus: Corollæ laciniis secundis. Drupa 2-locularis. Semina 4, seu abortu tantum 2.

EMPALEMENT five-cleft. Blossom with the divisions pointing one way. Berry 2-celled. Seeds 4, or from abortion only 2.

SPECIFIC CHARACTER.

VOLKAMERIA fruticosa glaberrima, foliis oblongo-lanceolatis integerrimis, pedunculis trichotomis axillaribus et terminalibus.

VOLKAMERIA shrubby and very smooth, with oblong-lanced very entire leaves, and peduncles divided by threes, both axillary and terminal.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open, one tip detached and magnified..
3. Seed-bud and pointal, summit magnified.
4. The seed-bud magnified.

VOLKAMERIA angustifolia is a dwarf branchy shrub flowering in great profusion about the middle of August. The blossoms are white and remarkably sweet-scented. It was communicated by Mr. Donn, Curator of the Cambridge Botanic garden, and is to be enumerated in the new edition of his Catalogue now in the press. It requires to be kept in the bark-bed in the hot-house, and is supposed to be a native of the Isle of France. We believe no other figure of it has been given.

1 2 3 4

Volhameria, angustifolia

Published as the Act directs 1st Nov. 1804
by B. Maund & Sowerby

PLATE DLV.

ZINGIBER CLIFFORDIÆ.

Cliffordian Zingiber.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Chive. One Pointal.

GENERIC CHARACTER.

CALYX monophyllus. Corolla 4—5-fida. Antheræ 2. Filamentum simplex ultra antheras productum.

EMPALEMENT of one leaf. Blossom either 4- or 5-cleft. Anthers two. Filament simple, extended beyond the anthers.

SPECIFIC CHARACTER.

ZINGIBER scapo simplicissimo, crasso, brevi, capitulo subovato, bracteis inferioribus latoovatis obtusis; corollâ 4-fidâ, laciniis tribus exterioribus oblongis marginibus involutis; alteris sub-cordatis duplo majoribus, mox convolutis.

GINGER with an unbranched, thick, short flower-stalk, the lower flower-scales broadly-oval and blunt: the blossom 4-cleft, the three outer divisions oblong with their margins turned inwards, the inner inversely nearly heart-shaped and doubly larger, soon folding together.

REFERENCE TO THE PLATE.

1. Sheath at the base of the calyx.
2. A detached flower.
3. Seed-bud, anthers, and pointal, summit magnified.
4. The plant in miniature.

THIS fine species of Ginger, we are informed, is a native of Guinea, and in the gardens has long been supposed to be the plant which produced the Grains of Paradise, Amomum Granum Paradisi of Linnæus; but it certainly by no means accords with the character of that plant, either as given in the Hortus Kewensis or by Linnæus himself. From the other species of Zingiber enumerated in the eighth volume of the Linnæan Society's Transactions it is easily distinguished Having as yet only blossomed in England in the collection of Lady de Clifford at Paddington, in honour of that patroness and lover of botany we have given its specific designation. The culture is the same as for other plants of the Ginger family. Our drawing was taken in 1804.

Pl. 336

Zingiber. Clifford.

PLATE DLVI.

PANCRATIUM AMŒNUM.

Broad-leaved Pancratium.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PETALA 6. Nectarium 12-fidum. Stamina nectario imposita.

PETALS 6. Honey-cup 12-cleft. Stamens seated on the nectary.

SPECIFIC CHARACTER.

PANCRATIUM spathâ multiflorâ, fragrantissimâ: foliis longo-lanceolatis, corollæ laciniis tubum excedentibus: nectario 6-lobato, sinubus sub-denticulatis. *Willd. Sp.*

PANCRATIUM with the sheath many-flowered, and very sweet-scented: the leaves long-lanced, the divisions of the blossom longer than its tube: and the nectary 6-lobed, mostly with little teeth between.

REFERENCE TO THE PLATE.

1. A flower spread open.

SEVERAL species of the genus Pancratium approach so very near to each other, that it is a difficult task to discriminate them with accuracy. We have little doubt that the *Pancratium foliis amplis ovatis* of Ehret (Trew's Plantæ Selectæ, tab. 28.) belongs to our plant, notwithstanding the absence of the little teeth between the lobes of the nectary. Indeed, that character appears so variable in the synonyms commonly given to this species, that we are rather inclined to doubt of its constancy. Neither are the painters of those days always safely to be trusted in such minutiæ. Mr. Lambert, who favoured us with the specimen in March 1808, informs us that he received the bulbs from Lord Seaforth, on his return to England from the West Indies, from the *Pancratium caribæum*, cultivated in the same collection. It is certainly distinct; the blossoms are extremely fragrant, and we are not yet certain whether the amœnum and fragrans of botanists may not be the same species.

Pancratium, amoenum

PLATE DLVII.

PERIPLOCA AFRICANA.

African Periploca.

CLASS V. ORDER II.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium ambiens genitalia, filamenta 5, exserentia.

CONTORTED. Honey-cup surrounding the stamens. Threads 5, standing out.

SPECIFIC CHARACTER.

PERIPLOCA foliis ovato-acutis, pilosis: floribus corymbosis: caule volubili, hirsuto. *Willd. Sp. Pl.*

PERIPLOCA with ovate-pointed hairy leaves: flowers corymbose: stem twining and hairy.

REFERENCE TO THE PLATE.

1. The empalement.
2. The outer part of the blossom.
3. The tubular part of the same detached.
4. The same spread open.
5. One of the lobes of the nectary surrounding the parts of fructification.
6. Seed-buds, chives, and pointals, magnified.

THE Periploca Africana is at present a rare plant to the gardens, although, according to Donn's Catalogue, it has been introduced to this country as long ago as the year 1726. There are several figures of it among the older botanists, but not one that does it any justice, as an ornamental green-house plant, which it undoubtedly is, and continues in bloom almost from June till January.

Our figure represents the entire plant, just as we received it from Messrs. Whitley and Brames.

Pl. 557.

Periploca, Africana

PLATE DLVIII.

FERULA PERSICA.

Persian Ferula.

CLASS V. ORDER II.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

ESSENTIAL GENERIC CHARACTER.

FRUCTUS ovalis, compresso-planus, striis utrinque 3.	FRUIT oval, flatly compressed, with three stripes on both sides.

SPECIFIC CHARACTER.

FERULA foliis supra-decompositis: foliolis multifidis, decurrentibus: umbellâ primordiali sessili.	FERULA with leaves more than doubly compound: leaflets many-cleft and decurrent: the first umbel of flowers sessile.

REFERENCE TO THE PLATE.

1. A perfect flower.
2. A male or abortive flower.
3. The pointals.

ASSA fœtida grows naturally near Gilan in Persia; and from seeds sent from thence to the Academy at St. Petersburgh plants were obtained, two of which were sent to Dr. Hope at Edinburgh, by Dr. Guthrie, to whom they had been presented by Professor Pallas, in whose herbarium we have seen specimens of it, but without fructification. One of these plants flowered and ripened seeds in the Botanic Garden at Edinburgh, and is described by Dr. Hope in the lxxvth vol. of the Philosophical Transactions, and a figure annexed, the only one hitherto published of the species; the Assa fœtida of Kæmpfer being undoubtedly a different plant. Our specimens were obligingly communicated by Dr Williams from the Botanic Garden at Oxford; which, with that of Edinburgh above mentioned, the Cambridge Garden, the Physic Gardens at Chelsea, and Mr. Dickson's private collection at Croydon, are the only gardens in Britain, as we are informed, that yet possess the plant. The gum exudes from the roots, which are tuberous and perennial, on the slightest incision being made; and every part of the plant, even to the extremities of the leaves, smells strongly of it. It is hardy enough to bear our climate, and even ripen its seeds in mild seasons. It is not improbable that at a future time we may be furnished with this valuable article of the Materia Medica, of English growth. The long list of its virtues mentioned by Dr. Woodville we need not here enumerate; its reputation as a cordial for low spirits alone, in these days, entitles it to notice.

PLATE DLIX.

CAMELLIA JAPONICA, *semi-duplex.*

Semidouble-flowered Camellia.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus, polyphyllus: interioribus majoribus. || EMPALEMENT tiled, many-leaved: the inner ones the largest.

SPECIFIC CHARACTER.

CAMELLIA floribus semi-duplicibus, staminibus divergentibus in petalos. || CAMELLIA with semi-double flowers, the stamens growing into petals.

REFERENCE TO THE PLATE.

1. The empalement.
2. The stamens growing into petals.
3. Seed-bud and pointals.
4. A transverse section of the seed-bud.

THIS Camellia with semi-double flowers was communicated to us by Mr. Davey, nurseryman and florist in the King's Road, Chelsea; who informs us it was a cutting from a plant brought by a gentleman from the coast of China, and regarded as distinct in its flowers from all those in cultivation with us. It certainly has a very different appearance; and as every variety in this short but splendid genus is particularly admired and sought after, this one, which possesses parts of its botanic character entire, will doubtless be considered by the amateurs of plants in general as a variety equally interesting.

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Camellia, Japonica, semi duplex

PLATE DLX.

VEREA ACUTIFLORA.

Pointed-flowered Verea.

CLASS VIII. ORDER IV.

OCTANDRIA TETRAGYNIA. Eight Chives. Four Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 4-phyllus. Corolla hypocrateriformis, 4-fida: tubo ventricoso. Nectaria 4, ad basin germinum. Capsulæ 4, superæ, 1-loculares, polyspermæ.

EMPALEMENT 4-leaved. Blossom funnel-shaped, 4-sided: tube bellied. Nectaries 4, at the base of the seed-buds. Capsules 4, above, one-celled, many-seeded.

SPECIFIC CHARACTER.

VEREA foliis lato-lanceolatis, oppositis, crenatis, crassis: floribus paniculatis, terminalibus: corollis albentibus: laciniis oris acutissimis.

VEREA with leaves broadly lance-shaped, opposite, scolloped, and thick. Flowers paniculated and terminal. Blossom whitish: segments of the border very pointed.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-buds and pointals.
4. The same magnified.

THIS new species of Verea flowered (we believe, for the first time in this country) in the collection of the Hon. C. Greville at Paddington, whence our drawing was taken. The foliage is compact, and rather handsome. The flowers are by no means specious; but, as it blossoms in the depth of winter, its rivals are but few. This considered, with the addition of its novelty, renders it a valuable acquisition to the hot-stove.

Pl. 56.

Vereia acutiflora

PLATE DLXI.

XERANTHEMUM FRAGRANS.

Fragrant Xeranthemum.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united Superfluous.

ESSENTIAL GENERIC CHARACTER.

RECEPTACULUM paleaceum aut nudum. Pappus setaceus. Calyx imbricatus, radiatus: radio colorato.

RECEPTACLE chaffy, or naked. Feather bristly. Empalement tiled, rayed: the ray coloured.

SPECIFIC CHARACTER.

XERANTHEMUM foliis undulatis, lanatis, apice reflexis: floribus parvis, odoratis, terminalibus: radiis calycis exterioribus rubris: radio interiore albo.
Habitat ad Caput Bonæ Spei.

XERANTHEMUM with waved woolly leaves reflexed at the point: flowers small, sweet-scented and terminal: the outer rays of the empalement red, the inner one white.
Native of the Cape of Good Hope.

REFERENCE TO THE PLATE.

1. A scale from the outer ray of the empalement.
2. A scale from the inner ray.
3. A flower of the disk.

THIS little Xeranthemum is a native of the Cape, perfectly new, and very sweet-scented. As fragrance is very unusual in this fine tribe of plants, we have on that account considered it as a good specific title. It was introduced to the Clapham gardens about the year 1803; and as we have not seen it since that period, we are inclined to think it is not at present in this country. In the herbarium of A. B. Lambert, esq. we found a fine native specimen of an unnamed species very much resembling our plant, but with a profusion of flowers—a habit which ours would in all probability have assumed as soon as it had been familiarized to the change of climate.

1 2 3

Xeranthemum fragrans

Pub.d as the Act directs 1st
by W. Curtis 3 Scarsdale Villas

PLATE DLXII.

CYNANCHUM BICOLOR.

Two-coloured Cynanchum.

CLASS V. ORDER II.

PENTANDRIA DIGYNIA. Five Chives. Two Pointals.

ESSENTIAL GENERIC CHARACTER.

CONTORTA. Nectarium cylindricum, quinquedentatum.

CONTORTED. Honey-cup cylindrical, five-toothed.

SPECIFIC CHARACTER.

CYNANCHUM foliis cordatis, acutis, pilosis: floribus in umbellis proliferis: corollis bicoloribus: petalis ad basin hirsutis: caule volubili.

CYNANCHUM with heart-shaped, pointed, hairy leaves: flowers grow in proliferous umbels: blossoms two-coloured: petals hirsute at the base: stem twining.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. The parts of fructification magnified.
4. The seed-bud, shaft, summit, and chives.
5. The same magnified.

THIS Cynanchum is, we believe, a perfectly new species, and continues to flower during the summer and autumnal months, running to a great length. In that, as well as in other particulars, it bears a considerable resemblance to the Cynanchum extensum of Jacquin's Icones, but is far superior to that species from its petals being enlivened with a rich purple spot, a slight tinge of which is even visible on the smallest buds. There is an abundant succession of bloom, and the flowers appear to expand with freedom. Our drawing was made last August from a fine plant in the hot-stove of the Countess de Vandes.

Pl. 362

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Cynanchum, bicolor.

PLATE DLXIII.

MIMOSA ELEGANS.

Elegant Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONŒCIA. Various Dispositions upon one Plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPH. Calyx 5-dentatus. Corolla 5-fida. Stamina 5, sive plura. Pistillum 1, legumen.
MASCUL. Calyx 5-dentatus. Corolla 5-fida. Stamina 5—10, sive plura.

HERMAPH. Empalement 5-toothed. Blossom 5-cleft. Chives 5 or more. Pointal 1, a pod.
MALE. Empalement 5-toothed. Blossom 5-cleft. Chives 5—10, or more.

SPECIFIC CHARACTER.

MIMOSA frutescens, inermis: ramis verrucosis: foliis bipinnatis, pinnis propriis 8- ad 9-jugis, partialibus 20- ad 24-jugis, cum impari ad imum minore; spicis axillaribus oblongis divaricatis.

MIMOSA shrubby, unarmed: with warty branches: leaves doubly winged, the first of 8 or 9 pairs, the second of 20 to 24 with a small odd leaflet at the bottom: spikes of flowers axillary, oblong, and divaricate.

REFERENCE TO THE PLATE.

1. A flower.
2. The same spread open.
3. The same shown from the inner side, one tip magnified.
4. The seed-bud and pointal, summit magnified.

MIMOSA elegans is one of the handsomest of the family that has yet been introduced from New Holland, and very rare, being at this time in no other private collection in this country, but that of A. B. Lambert, esq. from whom we received our specimens; and in whose conservatory it is now in full flower, his plant being about ten feet high and very much branched, with profusion of flowers. It is hardly possible to express the extreme delicacy of the blossoms. The stamens are united (monadelphous) towards the base, and are above two hundred in a single flower. What an apparatus for the impregnation of a single stigma!

From what we have already seen of the cultivation of the beautiful and interesting plants of this country, cultivators will do well to give them as much both of pot and branch room as their houses will afford; as well for the health of the plant as to display to advantage the size of its fine foliage, of which the circumscribed scale of our work would only allow us to represent one half.

Mimosa. elegans

PLATE DLXIV.

IXIA CURTA.

Short Ixia.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, patens, æqualis. Stigmata tria, erectiuscula, patula.

||

BLOSSOM six petals, spreading and equal. Summits three, nearly upright, and spreading.

SPECIFIC CHARACTER.

IXIA foliis falcatis: floribus alternis, tri-coloribus: caule humili.
Habitat ad Caput Bonæ Spei.

||

IXIA with scimitar-shaped leaves: flowers alternate, and three-coloured. Stem low.
Native of the Cape of Good Hope.

REFERENCE TO THE PLATE.

1. The two sheaths of the empalement.
2. A blossom spread open.
3. Seed-bud and pointal, summit magnified.

THIS new species of Ixia was delineated from a plant in the collection of J. Vere, esq. the summer before last, and although low in stature is certainly high in beauty, and surpassed by very few of loftier growth. It flowers about the middle of April, and requires the same treatment as most other Cape species.

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Ixia curta

Pl. 2e de la 2e Decade
de M. Redouté à Paris

PLATE DLXV.

RUTA LINIFOLIA.

Flax-leaved Ruta.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-partitus. Petala concava. Receptaculum punctis melliferis decem cinctum. Capsula lobata.

EMPALEMENT 5-parted. Petals concave. Receptacle beset with ten honey-bearing points. Capsule lobed.

SPECIFIC CHARACTER.

RUTA foliis simplicibus, lanceolatis, glabris: filamentis ciliatis: caule simplici, herbaceo.

Habitat in Hispania.
Ruta linifolia. *Willd. Sp. Pl.*

RUE with simple leaves, lance-shaped and smooth: threads ciliated. Stem simple and herbaceous.

Native of Spain.

REFERENCE TO THE PLATE.

1. A petal.
2. Empalement, chives, and pointal.
3. A chive.
4. The empalement, seed-bud, and pointal.

THE Ruta linifolia is a new plant to the gardens, and we believe is not at present in any other collection but that of Cambridge, where it was raised from seed by Mr. Donn. It is a handsome little herbaceous shrub, and requires the protection of the green-house to preserve it in this climate. Flowers in September and October.

Pl. 565

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Ruta linifolia

PLATE DLXVI.

CALLICOMA SERRATIFOLIA.

Sawed-leaved Callicoma.

CLASS XI. ORDER II.

DODECANDRIA DIGYNIA. Stamens 11 to 19. Styles 2.

GENERIC CHARACTER.

FLORES in capitulis subrotundis, pedunculatis; involucro sub 4-phyllo. Calyx 4—5-phyllus, foliolis lanceolatis. Corolla 0. Stamina 11—19, calyce triplo longiora, e receptaculo. Styli 2, filiformes: stigmate simplici: germen superum, monoloculare, polyspermum.

FLOWERS in little round heads, upon footstalks; with an involucre of about 4 leaves. Calyx of 4 or 5 leaves, the leaflets lanced. Blossom none. Stamens from 11 to 19, thrice as long as the calyx, growing from the receptacle. Styles 2, thread-shaped. Stigma simple. Germen above, 1-celled, and many-seeded.

REFERENCE TO THE PLATE.

1. A flower.
2. The same spread open, one tip magnified.
3. The seed-bud and pointals.
4. The same magnificd.

CALLICOMA serratifolia is a native of New South Wales, and has now for several years in some choice collections adorned the green-house and conservatory in early spring with its fine heads of flowers; but to whom we are indebted for its first introduction we are uncertain. Some botanists have considered it as a congener of Forster's *Codia*, to which it has certainly a considerable affinity; but as we cannot exactly see the propriety of coupling an apetalous flower having so many stamens with one that is pentapetalous and octandrous, and of which we have no description of the germen or fruit; and there being great probability that more plants of this family may be discovered in the vast tracts of New Holland yet unexplored, we have rather chose to describe it as distinct, than to excuse ourselves by leaving it to be separated at some future period and create more changes of names, a circumstance always to be deprecated and avoided as much as possible by Naturalists. Callicoma is a middle-sized shrub with the leaves finely cottony and whitish on the under side, and has considerable beauty even when out of blossom. It is propagated by layers.

Callicoma serratifolia

PLATE DLXVII.

CERATONIA SILIQUA.

Pod-bearing Ceratonia.

CLASS XXIII. ORDER II.

POLYGAMIA DIŒCIA. Many Nuptials on separate Plants.

GENERIC CHARACTER.

HERMAPH. Calyx 5-partitus. Corolla 0. Stamina 5—8. Stylus filiformis. Stigma capitatum. Legumen coriaceum, pulpâ plenum, polyspermum.

HERMAPH. Empalement 5-parted. Blossom none. Chives 5 to 8. Shaft thread-shaped. Summit headed. Pod leathery, full of pulp, and many-seeded.

REFERENCE TO THE PLATE.

1. A flower shown from the outside.
2. A dry pod a little opened, one seed detached.

INSTEAD of a new plant, we here submit to our readers one that according to the Kew Catalogue has been an inhabitant of our gardens 239 years: but neither Mr. Aiton nor Mr. Miller had ever seen it blossom, nor during all this long period have we any account of its flowering in this country. Its male flowers however appeared in the Cambridge Botanic Garden the beginning of last February, and from a specimen communicated by Mr. Donn to A. B. Lambert, esq. the present drawing was taken. Mr. Donn's plant was between 4 and 5 feet high, moderately branched, and had the same treatment as his other green-house shrubs. We are uncertain whether the hermaphrodite or female plant be yet in this country; but as the propagation is principally from seed, we think it is very probable. The stamens in our specimen vary in number, being commonly 5, sometimes 6, and more rarely 8. The fruit is added from a dried legume in the Lambertian collection, which was sent from Spain by the late Abbé Cavanilles, who in his *Icones Plantarum, vol.* 2. *p.* 8. and *tab.* 113. (in addition to what was formerly known of the Ceratonia) informs us, that it grows spontaneously on little hills and dry fields in Valencia, and is yet more impatient of cold and moisture than the olive, vast numbers being sometimes killed there by the frost in severe winters. It is in this province also, that the principal cultivation of this useful plant in Spain is situated. The propagation is from seeds, and the diœcious plants are always selected in preference to the hermaphrodites, being better bearers. Some of the more skilful cultivators engraft a male bough upon their female plants for their impregnation, and by this means have no sterile plants in their collections. They flower twice a year, first in February, and again more plentifully in August and September; which is also the time of the fruit's ripening, and the trees are seen at the same time adorned with blossoms, and laden with ripe fruit. Eighty pounds of legumes are sometimes collected from a single tree. They are known to be mature by their putting on a chesnut colour, and are then beaten from the trees by canes of the *Arundo Donax* from 16 to 20 feet long, with part of their crooked roots left, which serve as hooks. Rain is said to be beneficial to the ripe fruits, and even to improve them after they are laid in heaps on the ground. They are finally dried and stored up in barns for use. The cultivators enumerate three varieties, which they call *Melars, Llandars*, and *Costelluts*. The last they distinguish by having larger leaves and of a deeper green, with legumes often a foot long, but with little solidity or sweetness; the second has shorter legumes, but more solid and very sweet; the leaves also are shorter. The first are called Melars (*quasi Melleas*) from *Mel* honey, of which the fruit contains small drops, and sometimes in such abundance that it distils upon the ground, and is fed upon by the bees. The fruits are the principal food of the cattle in the province of Valencia, and also form part of the sustenance of the poor people. The leaves are used in the preparation of leather. Monsieur Olivier also informs us in his *Travels in the Ottoman Empire*, that the Carob-tree grows all over the Island of Crete, and delights most in stony grounds and the clefts of rocks; that the fruits are conveyed thence to Constantinople, to Syria and Egypt, and serve for food to the poor and to children. They are also an ingredient in the sherbets of which the Mussulmans make daily use.

Pl. 567

Ceratonia, siliqua

PLATE DLXVIII.

LIPARIA SPHÆRICA.

Round-headed Liparia.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus, lacinia infima elongata. Corollæ alæ inferius bilobæ. Filamenta alternatim breviora. Legumen polyspermum.	CALYX 5-cleft, the lower segment very long. Wings of the blossom two-lobed on the lower side. Chives alternately shorter. Pod many-seeded.

SPECIFIC CHARACTER.

LIPARIA floribus capitatis; foliis lanceolatis, nervosis, glabris. *Willd. Sp. Pl. vol.* iii.	LIPARIA with flowers in heads; the leaves lance-shaped, nerved, and smooth.

REFERENCE TO THE PLATE.

1. A bract.
2. The empalement.
3. A flower spread open.
4. The chives.
5. The same spread open.
6. Seed-bud and pointal.
7. A back view of the head of flowers.

AFRICA has long been celebrated as the land of wonders and novelties, and its vegetable as well as animal productions well entitle it to that character. The beauty and astonishing variety of ever-varying Geraniums, delicate Ixias, elegant Ericas, superb Amaryllises, and magnificent Proteas, received from the Cape of Good Hope alone within these few years, and many of them totally unknown before, have given to our gardens that splendour and perpetual novelty which justly make them the admiration of the world. What still more enhances the pleasure is, that the mine is yet unexhausted, as our present charming subject, not before enumerated in any of our catalogues of cultivated plants, will testify. Mr. Milne, gardener at Fonthill, well known for his zeal and skill in the cultivation of rare plants, obligingly communicated the specimens. Having forwarded the first a little too early, being struck with the singular beauty, and not knowing the habits of the plant, a fortnight after he forwarded a third specimen fully expanded, from which the figure is taken. Mr. Milne informs us, that he raised the Liparia from Cape seeds some years ago, and has kept it in the conservatory, where it is now in blossom. The plant is branchy, and between four and five feet in height. He thinks he possesses two more new species of the genus raised at the same time, which have not yet blossomed with him.

Lyparia sphærica.

PLATE DIXIX.

CEANOTHUS LANIGER.

Woolly Ceanothus.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PETALA 5, saccata. Bacca sicca, 3-locularis, 3-sperma.

||

PETALS 5, bagged. Berry dry, three-celled, three-seeded.

SPECIFIC CHARACTER.

CEANOTHUS foliis oblongo-lanceolatis, integerrimis, subtus lanuginosis; ramulis, pedunculis, petiolis, calycibusque hirsutis.

||

CEANOTHUS with the leaves oblong-lanced, entire, and woolly beneath; the branches, footstalks, flowerstalks, and calyxes hairy.

REFERENCE TO THE PLATE.

1. A flower.
2. A segment of the calyx, with a petal and stamen attached.
3. Seed-bud and pointal.

To New Holland we export criminals for our convenience and safety, and from thence import furs for our covering and flowers for our amusement. So far the balance of trade is in our favour. But by whose hands, or at what time, our present subject was first brought over, we have not been able to learn. The specimen was communicated by A. B. Lambert, esq. in the beginning of April from his collection at Boyton, and we have also seen the plant very finely in flower at Mr. Whitley's nursery, Brompton. Its woolly leaves and branches, contrasted with the Mimosas and other hard-leaved plants from the same country, make an agreeable variety, and the early blossoms are very ornamental. The plants we have seen are moderate-sized branchy shrubs, are kept in the green-house like other New Holland plants, and require no particular treatment. We have seen more species from the same country in herbariums, and some are now alive in this country, although they have not yet blossomed.

Ceonothus laniger.

PLATE DLXX.

JUSTICIA NITIDA.

Shining-leaved Justicia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX simplex seu duplex. Corolla 1-petala, irregularis. Capsula ungue elastico dissiliens: dissepimentum contrarium; adnatum.

EMPALEMENT simple or double. Blossom one-petalled, irregular. Capsule splitting with an elastic claw: partition contrary to the valve; affixed.

SPECIFIC CHARACTER.

JUSTICIA fruticosa: foliis ellipticis, acuminatis: racemis spicæformibus, verticillatis: bracteis minutis: pedicellis calycibusque glabris.

Swartz. Flora Indiæ occidentalis.

Habitat in insulis Jamaicæ, S. Christophori, Martiniquæ, S. Crucis, et Guadalupæ.

JUSTICIA with a shrubby stem: leaves elliptic and pointed: raceme in the form of a spike, whorled: floral leaves small: footstalks and calyx smooth.

Native of Jamaica, St. Christopher, Martinique, St. Croix, and Guadaloupe.

REFERENCE TO THE PLATE.

1. A flower spread open.
2. Seed-bud and pointal.
3. The capsule.
4. The same split open.

OF this species of Justicia the only figure extant that we know of is a very indifferent representation of it in Sloane's Jamaica, evidently from a dried specimen. The fine glossy character of the foliage has furnished it with a specific title. The flowers are abundant in succession, but, like most of this genus, of a deciduous or short-lived character. It was introduced to the British gardens, according to Donn's Catalogue, in 1793. Our drawing was made from a plant brought from the West Indies by Lord Seaforth, which flowered in August 1808 in the hot-stove of A. B. Lambert, esq.

Pl. 570

Justicia, nitida

PLATE DLXXI.

SIDA PATENS.

Spreading Sida.

CLASS XVI. ORDER VIII.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX simplex. Stylus multipartitus. Capsulæ plures, mono- seu tri-spermæ.

CALYX simple. Pointal many-parted. Seed-vessels many, one- or three-seeded.

SPECIFIC CHARACTER.

SIDA foliis cordatis, dentatis, longè acuminatis, leviter pubescentibus; pedunculis solitariis petiolis longioribus; corollis patentibus; stylis quinquepartitis; capsulis quinque, birostratis.

SIDA with heart-shaped, toothed, long-pointed, and slightly woolly leaves; solitary flower-stalks longer than the footstalks; spreading corollas, five-parted styles, and five two-beaked capsules.

REFERENCE TO THE PLATE.

1. The empalement.
2. The chives spread open, one tip magnified.
3. Seed-bud and pointal.

ANOTHER African novelty introduced by Viscount Valentia in 1806 from Abyssinia; and from specimens obligingly communicated by him from his gardens at Arly the drawing is taken. From the seeds already introduced by his Lordship from that yet unexplored, and hitherto almost inaccessible country, and from the connexions he is now endeavouring to establish there, Mr. Salt, who travelled in his Lordship's suite, being now dispatched on an embassy to the King of that country at Gondar, we may soon hope to have a few more specimens of its vegetable productions; at present as imperfectly known as the sources of the Nile, which have eluded the researches of philosophers above two thousand years.

Sida patens, in the natural arrangement of the genus, should be placed next to *Sida reflexa* of Cavanilles and Willdenow.

Sida. patens

PLATE DLXXII.

PROTEA SALIGNA.

Willow-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, seu 4-petala. Antheræ lineares, petalis infra apices insertæ. Calyx proprius, nullus. Semina solitaria.

BLOSSOM four-cleft, or of four petals. Tips linear, inserted into the petals below the points. Cup proper, none. Seeds solitary.

SPECIFIC CHARACTER.

PROTEA foliis obliquis, lanceolatis, pubescentibus: capitulis oblongis, involucratis, terminalibus.

Feminei flores ramos terminant cum cono ovato magnitudine pisi, involucro bicolori circumdato.

Habitat ad Caput Bonæ Spei.

PROTEA with oblique, lance-shaped, hairy leaves: heads of flowers oblong, involucrated, and terminal.

Female flowers terminate the branches with an ovate cone about the size of a pea, surrounded by a two-coloured involucrum.

Native of the Cape of Good Hope.

REFERENCE TO THE PLATE.

1. A flower, one tip magnified.
2. Seed-bud and pointal, summit magnified.
3. Section of a head of flowers from the female plant.
4. Seed-bud and pointal, magnified.

PROTEA saligna, in the Species Plantarum of Linnæus, is considered as only a variety of P. conifera, but is certainly specifically distinct in its foliage, however resembling in other particulars. Finding, soon after we had made our drawing, a female plant in fine bloom, we have annexed a branch of it on the same plate, to elucidate as much as possible the apparent confusion that at present seems to pervade this section of the Genus Protea. The P. saligna of Thunberg, enumerated by Willdenow, we have no doubt, describes the female specimen we have represented, the cone being there mentioned as about the size of a pea, and which exactly accords with our figure. The drawings were made from plants introduced to this country from the Cape of Good Hope, in the year 1806, by G. Hibbert, esq.

Protea, saligna

PLATE DLXXIII.

MAGNOLIA AURICULATA.

Ear-leaved Magnolia.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 3-phyllus. Petala 6—12. Capsulæ 2-valves, imbricatæ. Semina baccata, pendula.

CUP 3-leaved. Petals 6—12. Capsules 2-valved, tiled. Seeds berried, pendulous.

SPECIFIC CHARACTER.

MAGNOLIA foliis obovato-lanceolatis, basi attenuatis, auritis, glabris, subtus glaucis.

MAGNOLIA with obovate lance-shaped leaves, attenuated towards the base, eared, smooth, and glaucous beneath.

Habitat in America boreali.

Native of North America.

REFERENCE TO THE PLATE.

1. A chive.
2. Seed-bud and pointals.

AMONGST the finest hardy exotics that ornament the gardens, the Magnolias are eminently conspicuous. A fine species of that description our figure represents, drawn from a plant seven feet high in the nursery-ground of Messrs. Whitley and Brames, who inform me that it was sent to them from Maryland in North America, by Mr. Bartram, about the year 1793. It does not seed with us, as very few of the genus do; and when any of them appear to have ripened their seed perfectly, we understand they have very rarely if ever vegetated. This species is perfectly hardy, but is with difficulty raised by layers; which accounts for its being (after a period of sixteen years since its first introduction to this country) not so generally known as it deserves to be. It flowers in the month of May.

Magnolia auriculata

2

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PLATE DLXXIV.

PULTENÆA OBCORDATA.

Inversely Heart-leaved Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus, utrinque appendiculatus. Corolla papilionacea, alis vexillo brevioribus. Legumen uniloculare, dispermum.

CUP five-toothed, with an appendage on each side. Blossom butterfly-shaped, with the wings shorter than the standard. Pod of one cell, with two seeds.

See Pultenæa Daphnoides, Pl. XCVIII. Vol. II.

SPECIFIC CHARACTER.

PULTENÆA foliis obcordatis, mucronatis, nitidis.

PULTENÆA with inversely heart-shaped leaves, mucronated, and shining.

REFERENCE TO THE PLATE.

1. The empalement.
2. The vexillum.
3. One of the wings.
4. The two petals of the keel.
5. The chives and pointal, one tip magnified.
6. Seed-bud and pointal.

THIS nondescript species of Pultenæa is a native of New Holland, and was discovered on Van Diemen's Land by Mr. Littlejohn, one of the residents on Governor Collins's settlement. It possesses lively yellow flowers, and singularly obcordate leaves, and is a handsome addition to the genus Pultenæa, of which it is a genuine member, having the two little appendages on the cup, the principal (although trivial) leading feature that characterizes the genus. Our drawing was made from a specimen communicated by A. B. Lambert, esq. with whom it has flowered for the first time in this country.

1 2 3 4 5 6

Pultænea, obcordata

PLATE DLXXV.

MARTYNIA DIANDRA.

Diandrous Martynia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Corolla ringens. Capsula lignosa, corticata, rostro hamata, 4-locularis, 4-valvis.	Calyx five-cleft. Corolla gaping. Capsule woody, covered, with a hooked beak; 4 divisions, and 4 openings.

SPECIFIC CHARACTER.

Martynia caule ramoso, foliis oppositis, cordatis, dentatis, floribus diandris. *Willd. Sp. Pl.*	Martynia with the stem branching, leaves opposite, heart-shaped, and toothed, and flowers diandrous.

REFERENCE TO THE PLATE.

1. The empalement.
2. The chives.
3. Seed-bud and pointal.
4. The capsule.

We are glad to have an opportunity of giving a figure of a plant so very ornamental, and so rarely met with in our collections. Martynia diandra is a native of Mexico about Vera Cruz, and requires to be kept in the hothouse, or a glass frame with artificial heat, and has much the same delicate texture as the Martynia proboscidea. Of the figures that have before been published of it, that of Jacquin in his Hortus Schœnbrunnensis, vol. iii. plate 289, is by far the best. A specimen was communicated by A. B. Lambert, esq., in November 1808, and another in May last from a plant which had outlived the winter, and from which the present figure is taken. All the species of Martynia are considered as annuals.

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Martynia, diandra

PLATE DLXXVI.

LITHOSPERMUM TINCTORIUM.

Dyers' Bugloss.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infundibuliformis, fauce perforata, nuda. Calyx 5-partitus. || BLOSSOM funnel-shaped, with the mouth open and naked. Cup 5-cleft.

SPECIFIC CHARACTER.

LITHOSPERMUM villosum caulibus procumbentibus. *Sp. Pl. editio prima.* || LITHOSPERMUM hairy. Stem procumbent.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal.

THIS rare plant, enumerated in the Hortus Kewensis upon the authority of Sutherland's Catalogue of the Plants in the Physic Garden at Edinburgh, published in 1683, has been long a desideratum in our collections. It grows naturally in dry sandy places about Montpelier, and also in the southern provinces of the Russian empire, from whence we have seen fine specimens collected by Professor Pallas in Mr. Lambert's Herbarium, which now contains the whole collection made at the expense of the Russian Government, during the space of 30 years, by that great naturalist and his assistants. The plant is well calculated for ornamenting rock-works, or light sandy and gravelly borders. The roots are an article of trade, and used to give a red colour to oils, wax, and spirits of wine. Linnæus, after having very properly arranged this plant as a Lithospermum in the first edition of his Species Plantarum, afterwards removed it to the genus Anchusa, which alteration has since been adopted by every editor of his works. The character, however, is decidedly that of a Lithospermum; and the alteration would be difficult to account for, were it not for a memorandum of the late M. L'Heritier (published in the Flore Française), stating that he had seen another plant under that name in the Linnæan herbarium. It therefore appears that Linnæus, after having described the true plant, from his not possessing a specimen of it had afterwards mistaken some species of Anchusa for it. The plant, however, was retained in its proper genus by Gerard in his Flora Gallico-Provincialis, and he has since been followed by Decandolle in the Flore Française. We are aware of Professor Vahl and Willdenow's having given to another Lithospermum the name of tinctorium; but if the genus Arnebia of Forskahl is given up, the characteristic specific of testigma applied to it by Lamarck may be restored. We have never seen any figure of the plant but that of Plenck, Aubriet s in Alyon's Cours de Botanique, and the wooden cut of John Bauhin; the plant figured under the name of Anchusa tinctoria in Woodville's Medical Botany being the Anchusa officinalis. Specimens were communicated by A. B. Lambert, esq., and there is also a fine spreading plant of it now in blossom (May 27th) in the natural ground, in Mr. Harrison's nursery at Brompton.

1 2 3

Lithospermum tinctorium

PLATE DLXXVII.

PROTEA VIRGATA.

Twiggy Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida, seu 4-petala. Antheræ lineares, petalis infra apices insertæ. Calyx proprius, nullus. Semina solitaria.

Blossom four-cleft, or of four petals. Tips linear, inserted into the petals below the points. Cup proper, none. Seeds solitary.

SPECIFIC CHARACTER.

Protea foliis linearibus acutis, supra concavis, subtus convexis: floribus confertis, procumbentibus.

Habitat ad Caput Bonæ Spei.

Protea with linear pointed leaves, concave above, and convex beneath. Flowers crowded, and lying on the ground.

Native of the Cape of Good Hope.

REFERENCE TO THE PLATE.

1. A flower complete, summit magnified.

The application of specific titles to this wide-spreading family of plants is now become an arduous task; and considering how many of the best are already occupied, an exclusive reference cannot be expected. This species of Protea is altogether new, but bears a powerful resemblance in the flowers to the P. humiflora: but the distinct character of its foliage gives to the tout ensemble a perfect air of novelty; nor is there any figure or description of it extant, that we know of.

Our drawing was made from a fine plant at the nursery of Mr. Knight in the King's Road, Chelsea.

Protea virgata.

PLATE DLXXVIII.

ÆGIPHILA DIFFUSA. Fig. 1.

Spreading Ægiphila.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 4-dentatus. Corolla 4-fida. Stylus semibifidus. Bacca bilocularis, loculis dispermis.	Cup four-toothed. Blossom four-cleft. Shaft cleft half-way down. Berry two-celled, cells two-seeded.

SPECIFIC CHARACTER.

Ægiphila foliis ovato-lanceolatis, longè acuminatis, utrinque glabris; paniculis diffusis axillaribus et terminalibus; staminibus tubo vix excedentibus, stylo longissimo.	Ægiphila with oval-lanced, long pointed leaves, smooth on both sides; panicles spreading, axillary, and terminal; stamens scarcely longer than the tube, and shaft very long.

ÆGIPHILA OBOVATA. Fig. 2.

Inversely Oval-leaved Ægiphila.

SPECIFIC CHARACTER.

Ægiphila foliis obovatis acuminatis, utrinque glabris; paniculis axillaribus et terminalibus; pedicellis calycibusque minutè pubescentibus.	Ægiphila with leaves inversely oval, pointed and smooth; panicles axillary and terminal; flower-stalks and calyxes minutely pubescent.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal, as it appears in the opening buds.
4. The same when fully expanded.

This very natural genus was established by Jacquin from the Bois Cabril of the Creoles in Martinico, a shrub, the young shoots of which are greedily sought for and eaten by their cattle, particularly goats, whence the name (in English) Goatwood; and which Jacquin, following the botanical canon, elegantly turned into Ægiphila. With this species the celebrated Swartz has conjoined the Knoxia of Browne's Jamaica and Manabea lævis of Aublet's Guiana, and added two more species, Æ. fœtida and Æ. trifida, discovered by himself; and Willdenow has yet further augmented it with the Manabea villosa and arborescens of Aublet, and the Nuxia of Lamarck: the last, however, we consider as a very doubtful species. That fine collection of plants from the West Indies, introduced in 1807 by lord Seaforth, and by him presented to A. B. Lambert, esq. and which we have already so often quoted, has brought to our knowledge two more species, which we have denominated diffusa and obovata, from what appeared to us to be their most prominent features. Both shrubs are natives of the West Indies, and were sent to us in flower in August 1808. They are propagated by cuttings, and have not yet ripened seeds in England, but produce flowers annually in abundance during the months of July and August.

Aegiphila, diffusa fig 1.

1 2 3 4

Aegiphila, obovata fig 2.

PLATE DLXXIX.

CRATÆGUS AZAROLUS.

The Azarole.

CLASS II. ORDER XII.

ICOSANDRIA DIGYNIA. Twenty Chives. Two Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquefidus. Petala quinque. Bacca infera, 1—5-sperma. || CUP five-cleft. Blossom five petals. Berry below, with from 1 to 5 seeds.

SPECIFIC CHARACTER.

CRATÆGUS foliis obtusis, subtrifidis, dentatis, pubescentibus. || CRATÆGUS with blunt, pubescent, toothed leaves generally 3-cleft.

REFERENCE TO THE PLATE.

1. A flower spread open.
2. The same shown from the outer side.

THE Azarole grows naturally in Italy, in the South of France, in Carniola, and on the banks of the Tanais in the Russian empire, where it was found by Gerber in 1741. It grows to be a tree of rather small size, and is much cultivated in Italy, in the South of France, and in Sicily, for the sake of the fruit, which is as large as a cherry, of a fine red colour with sometimes a tinge of yellow, and is said to have a very agreeable flavour. At present the Azarole is very scarce in this country, and we have never seen it in blossom but at Burchall's nursery at Fulham, in May 1808, when our drawing was made. This year the plant has produced no blossoms. To those who are desirous of cultivating the Azarole, and adding another variety to their deserts, we would recommend planting it in well sheltered situations; or perhaps training against a wall, as practised for peaches and other delicate fruits, would be still better. Considerable trees of the Azarole formerly existed in His Majesty's Gardens at Kew, and in those of the Duke of Northumberland at Sion House; and we have lately seen the remains of one in Mr. Swainson's collection at Twickenham; but we are not aware that any exist at present in England. That of Plenck excepted, in his Medical Plants, Pl. 390, we believe no other coloured figure of it has before been published.

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Crataegus. Azarolus

PLATE DLXXX.

MESEMBRYANTHEMUM ACINACIFORME.

Scimitar-leaved Mesembryanthemum.

CLASS XII. ORDER IV.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

PETALA valde numerosa, linearia, basi cohærentia.	PETALS very numerous, linear, cohering at the base.

SPECIFIC CHARACTER.

MESEMBRYANTHEMUM foliis acinaciformibus: floribus amplissimis, lætè purpureis. *Dillenii Hortus Elthamensis,* tab. CCXI.	FIG-MARYGOLD with scimitar-shaped leaves: flowers very large, and of a bright purple colour.

REFERENCE TO THE PLATE.

1. The empalement, seed-bud, and pointals.

THROUGHOUT this extensive tribe of plants, this is the most splendid species of Mesembryanthemum we are at present acquainted with; and although an old plant in the gardens, it is quite a rarity to meet with it in flower. Our specimen is from the collection of Mr. Trimmer, of Kew Bridge, whose method of forcing it into bloom may be worth the attention of cultivators. It is by training it up against the glass, and watering it very sparingly; indeed, so little water is requisite for many of the succulent plants, that we have seen them thrive very well without any, except what they absorb from the humidity of the atmosphere in the descending dews.

PLATE DLXXXI.

SALIX VIOLACEA.

Violet-coloured Willow.

CLASS XXII. ORDER II.

DIŒCIA DIANDRIA. Chives and Pointals on different Plants. Two Chives.

ESSENTIAL GENERIC CHARACTER.

* *Masculi flores.*

AMENTUM cylindraceum. Calyx squamosus. Corolla 0. Glandulæ baseos nectariferæ.

* *Feminei flores.*

AMENTUM cylindraceum. Calyx squamosus. Corolla 0. Stylus 2-fidus. Capsula 1-locularis, 2-valvis. Semina papposa.

* *Male flowers.*

CATKIN cylindrical. Empalement squamous. Blossom none. Glands at the base, bearing honey.

* *Female flowers.*

CATKIN cylindrical. Empalement squamous. Blossom none. Shaft 2-cleft. Capsule 1-locular, 2-valved. Seeds downy.

SPECIFIC CHARACTER.

SALIX foliis lanceolatis, acuminatis, serrulatis, glabris, subtus glaucis: ramis pulvere violaceo tectis.

WILLOW with lance-shaped leaves finely sawed, smooth, and glaucous beneath: branches covered over with a violet-coloured powder.

REFERENCE TO THE PLATE.

1. A male flower.
2. A bit of the lower part of the stem with some of the powder rubbed off.

THIS fine species of willow is remarkable, first, for the gigantic size of its shoots, rising to the height of ten and sometimes twelve feet in one season; secondly, for their superior tenacity, being yet more tough than the common Osier; and thirdly, for the singular blue powder (considerably resembling that found upon the Orleans plum) with which they are always covered; and which, when any part of it has been accidentally rubbed off, is very quickly regenerated. It is said to be a native of Russia or Siberia, and to have been introduced by Mr. John Bell of Sion Gate about the year 1798. Whether it may or may not be the same species as Salix acutifolia of Willdenow, which he published without having seen the fructification, we leave to those who have seen his specimen to determine.

Our specimens are from the collection of A. B. Lambert, esq. who informs us that it produces in April male flowers annually at Boyton, and besides its great utility is a very ornamental plant.

Salix violacea

PLATE DLXXXII.

PROTEA MELLIFERA ALBIFLORA.

White-flowered Honey-bearing Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, seu 4-petala. Antheræ lineares, petalis infra apices insertæ. Calyx proprius, nullus. Semina solitaria.

BLOSSOM four-cleft, or of four petals. Tips linear, inserted into the petals below the points. Cup proper, none. Seeds solitary.

SPECIFIC CHARACTER.

PROTEA foliis lanceolatis ellipticis: capituloque terminali, magno, albo.
Habitat ad Caput Bonæ Spei.

PROTEA with elliptic lance-shaped leaves: head of flowers terminal, large, and white.
Native of the Cape of Good Hope.

REFERENCE TO THE PLATE.

1. Seed-bud, chives, and pointal.

WHETHER we consider this Protea as a species, or only a variety, it well deserves a representation. The only plant we have ever seen of it, and from whence our figure was taken, was in the collection of the Duke of Northumberland at Sion House, in the year 1807. Its unequivocal claim to the specific title of mellifera we unawares experienced, as, in bending the plant a little forward to view the interior of its flowers, (the plant being near seven feet high,) it literally poured out a stream of nectareous juice, the cup being filled with honey as high as the imbrications could possibly contain it.

Protea, mellifera Thunb.

PLATE DLXXXIII.

LONICERA JAPONICA.

Japanese Woodbine.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 1-petala, irregularis. Bacca polysperma, bilocularis, infera.	Blossom of one petal, irregular. Berry many-seeded, 2-celled, below.

SPECIFIC CHARACTER.

Lonicera foliis perennantibus petiolatis villosis: caule volubili.	Lonicera with ever-green downy leaves upon footstalks, and a twining stem.
Lonicera japonica. *Willd. Sp. Pl.*	

REFERENCE TO THE PLATE.

1. A flower spread open.
2. The seed-bud and pointal.

This far-fetched and yet rare species of "the luscious woodbine" is the Kin-gin-qua, or Gold and Silver Flower, of the Japanese, as we learn from Kæmpfer and Thunberg. The same name is also affixed to a Chinese drawing of the plant, a copy of which we have seen in the collection of A. B. Lambert, esq. From the same drawing we learn that the flowers come sometimes more in heads, and much more numerous than in our specimen; which may probably be accounted for from the plants being kept here in the green-house. Being an ever-green, like the Minorca and American twining honey-suckles, the species is the more desirable. It was introduced, we are informed, from China about the year 1805, and our drawing was taken in July 1809, in the garden of the Count de Vandes at Bayswater.

Lonicera Japonica

PLATE DLXXXIV.

PHLOMIS SAMIA.

Samian Phlomis.

CLASS XIV. ORDER I.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTER.

Calyx angulatus. Corollæ labium superius incumbens, compressum, villosum.	Cup angled: upper lip of the corolla incumbent, compressed and downy.

SPECIFIC CHARACTER.

Phlomis caule hirsuto, foliis cordatis, crenatis, subtus tomentosis, bracteis tripartitis subulatis mucronatis calycem æquantibus. *Willd. Sp. Pl.* 3. *p.* 120.	Phlomis with a hairy stalk: leaves heart-shaped, scolloped, and cottony underneath: bracts 3-parted, awl-shaped, as long as the cup.

REFERENCE TO THE PLATE.

1. The empalement.
2. A flower spread open.
3. Seed-bud and pointal.

This curious species appears to have been introduced by Mr. Miller; but, not being enumerated in the Hortus Kewensis, nor the Catalogue of the Cambridge Botanic Garden, must have been since lost. Indeed Mr. Miller informs us, that the severe winter of 1740 destroyed all the plants of it then in England. A. B. Lambert, esq. who communicated the specimens in July last from his garden at Boyton, informs us that Dr. Williams, regius professor of botany at Oxford, favoured him with the plant; and his predecessor Dr. Sibthorpe, who made two journeys into Greece to enrich us with the natural history of that interesting country, was probably the re-introducer. The name Samia is derived from the island of Samos; but Monsieur Desfontaines informs us (in his Flora Atlantica) that the original Samian plant of Tournefort and the Phlomis Samia of Linnæus (which he found wild about Mount Atlas) are different species. Both may possibly be natives of Samos: the posthumous Flora Græca of Dr. Sibthorpe, now publishing by his friend Dr. Smith, will, we trust, decide it. There is no prior figure of the plant.

Phlomis. Samia 1 2 3

PLATE DLXXXV.

SOPHORA JAPONICA.

Japanese Sophora.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-dentatus, supernè gibbus. Corolla papilionacea: alis longitudine vexilli. Lomentum moniliforme.	Cup five-toothed, swelling above. Blossom butterfly-shaped, with wings the length of the keel. Pod necklace-shaped.

SPECIFIC CHARACTER.

Sophora foliis pinnatis: foliolis pluribus ovatis glabris: caule arboreo. *Willd. Sp. Pl.*	Sophora with winged leaves: the leaflets numerous, ovate, and smooth: stem arborescent.

REFERENCE TO THE PLATE.

1. The empalement.
2. The vexillum.
3. One of the alæ.
4. The carina.
5. The chives.
6. The seed-bud and pointal.

Sophora japonica is the largest species of that genus at present known. The specimen exhibited is from a tree more than 40 feet high, in the collection of John Ord, esq. at Purser's Cross, Fulham, which was planted by himself about fifty years ago. Our attachment to even the inanimate companions of our youth, and the pleasure we derive from them, are thus beautifully expressed by one of our English poets (Cowley, we believe):

"A wood coëval with himself he sees;
And loves his old cotemporary trees."

Mr. Ord obtained his plants of Mr. Gordon, nurseryman at Mile End, who introduced the species from China in the year 1753. The first time of its flowering in this country, we learn, was in his Grace the Duke of Northumberland's collection at Sion, in August 1797. The only figure we have seen is in Jacquin's Hortus Schœnbrunnensis, vol. iii. Burmann, in his Flora Indica, and after him Linnæus, describe the flowers as white. In Mr. Ord's garden they are of a faint yellow, as in the figure of Jacquin; and in the specimens which we have seen from Sion House, faint yellow tinged with purple. Excellent in the study of flowers is the maxim of Virgil,

"..... Nimiùm ne crede colori."

Pl. 205

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Sophora. Japonica

PLATE DLXXXVI.

LILIUM SPECIOSUM.

Showy Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, campanulata: nectarium linea longitudinalis: capsulæ valvulis pilo cancellato connexis.

||

BLOSSOM 6-leaved, bell-shaped. Nectary a longitudinal line. Valves of the seed-pod connected with a lattice-work of hairs.

SPECIFIC CHARACTER.

LILIUM foliis sparsis, ovato-oblongis: floribus cernuis mox revolutis: caule ramoso.
Lilium speciosum. *Willd. Sp. Pl.*

||

LILY with scattered oval-oblong leaves: the flowers nodding, soon rolled back, and the stem branching.

REFERENCE TO THE PLATE.

1. Seed-bud and pointal.

WE can but seldom have the pleasure of recording so valuable an acquisition to our collections as this truly magnificent species, introduced from China by the Right Hon. Sir Joseph Banks about the year 1807, and a figure of it also published by him in 1791, being plate 47 of the Icones Selectæ, from drawings made in Japan by Kæmpfer, and now deposited in the British Museum. The woolliness and bulbs on the stem in our specimen, and the want of constriction at the base of the leaves, (if any such ever exists in nature,) differ considerably from the figure above quoted; but the strong general resemblance, and a consideration of the many variations to which other species of this genus are subject, induce us to regard it as a variety from the same common stock. The stem rises to between three and four feet in height, and sometimes even higher; and produces from three to nine or more flowers, according to its strength and situation. The bulb which it produces from the base of every leaf forms a future plant, and thus to unrivalled beauty adds abundance. Its time of flowering enhances its value, being in August, when all other lilies have deserted the parterre. Mr. Williams, nurseryman at Turnham Green, favoured us with the specimen.

Lilium, speciosum

PLATE DLXXXVII.

CORCHORUS? JAPONICUS *flore pleno.*

Japanese Corchorus with double flowers.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 5-petala. Calyx 5-phyllus, deciduus. Capsula plurivalvis, loculamentosa.	Blossom of 5 petals. Cup 5-leaved, falling off. Fruit with many valves, subdivided.

SPECIFIC CHARACTER.

Corchorus capsulis rotundis glabris, foliis duplicato-serratis.—*Flora Japonica, p.* 227.	Corchorus with round smooth capsules, and the leaves doubly sawed.

REFERENCE TO THE PLATE.

1. The pointals.

This elegant shrub is amply described in the Flora Japonica of Professor Thunberg, who found it growing naturally about Nagasaki, Miaco, and various parts of the Japanese empire; where it is also commonly cultivated for ornament. The double variety here figured he particularly specifies as naturally adorning the country about Miaco. In Houttuyns Pflanrensystem, vol. vii. plate 54, there is also an engraving of it. The single-flowered has not yet been introduced to this country. The time of blossoming is in early spring: but it does not appear to confine itself to that season, as we have been favoured with fresh specimens at various seasons from April to October; and we may therefore safely predict its being long a favourite with cultivators. The flexile twigs starred with blossoms look at a little distance like garlands, and extend when supported to a great length. All the flowers that we have seen are from 5- to 8-gynous; which, with the singular form of the capsule, makes us consider it as a very doubtful species of Corchorus. The Japanese name is Jamma Buki.

Our figure is taken from specimens communicated by Mr. Milne of Fonthill, who informs us that his plant now growing in the conservatory is ten feet high. We first observed it in bloom early last spring at Messrs. Colville's, and in several other collections during the summer, but smaller both in flowers and leaves.

Cimbidium Japonicum, Lou.

PLATE DLXXXVIII.

SIDA HASTATA.

Halberd-leaved Sida.

CLASS XVI. ORDER VIII.

MONADELPHIA POLYANDRIA. One Brotherhood. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX simplex, angulatus. Stylus multi-partitus. Capsulæ plures, 1- seu 3-spermæ.

CUP simple-angled. Shafts many-parted. Seed-pods many, one- to three-seeded.

SPECIFIC CHARACTER.

SIDA foliis inferioribus cordatis angulatis, superioribus elongato-hastatis; pedunculis axillaribus, unifloris, longissimis.
Sida hastata, *Willd. Sp. Pl.*

SIDA with the lower leaves somewhat heart-shaped and angled, the upper ones long-halberd-shaped; flower-stalks very long, one-flowered, and axillary.

REFERENCE TO THE PLATE.

1. The chives spread open.
2. The pointals.

THIS species was first properly distinguished and described by the Spanish botanist Cavanilles in his Dissertatio de Sida, where he has also given a figure of it; and upon this with the Sida cristata and Dilleniana his genus Anoda was founded. Other botanists, however, have not agreed to this division, and both Professor Martyn in his Dictionary and Willdenow still consider them as Sidas of which they now enumerate 99 species; and the new species brought from Abyssinia by Lord Valentia, and published in our 117th number, completes the century. Most of the species have been destined by nature to blossom beneath a milder sky than ours; the Sida hastata was found by the French botanist Dombey growing naturally in Peru and Lima in moist places; and A. B. Lambert, esq., who favoured us with the specimen last September, received the seeds from the East Indies. The two other varieties of this enumerated by Cavanilles and Willdenow we have not seen. The plant is annual, and has yet been kept in the stove.

Pl. 588

Sida. hastata

PLATE DLXXXIX.

GLADIOLUS ANGUSTUS, *minor.*

Small Narrow-leaved Cornflag.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla sexpartita, ringens. Stamina adscendentia.	Blossom six divisions, gaping. Chives ascending.

SPECIFIC CHARACTER.

Gladiodus foliis linearibus, longis, costatis; corollis flavescentibus; petalis tribus inferioribus rubro notatis.	Cornflag with linear leaves long and ribbed: blossom yellowish; the three lower petals marked with red.
Gladiolus angustus. *Jacquin. Icones, tab.* 252, *vol.* ii.	

REFERENCE TO THE PLATE.

1. The outer sheath of the empalement.
2. The inner sheath.
3. A blossom spread open.
4. Seed-bud and pointal.
5. Flower of a larger variety.

Our figure represents a plant from the nursery of Mr. Williams, and which we at first were inclined to regard as a distinct species from the Gladiolus angustus of Jacquin: but meeting soon after with a plant in the collection of Messrs. Whitley and Brames, of larger dimensions, (a flower of which we have represented,) its intermediate character appears, upon comparison, to connect a regular chain of variation, the smallest link of which is (at present) the one now figured.

Both plants are of easy culture, requiring no other treatment than what is common to bulbs of this class.

Gladiolus longustus

PLATE DXC.

MESPILUS ODORATISSIMA.

Sweet-scented Mespilus.

CLASS XII. ORDER V.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Petala 5. Bacca infera, 5-sperma.	Calyx 5-cleft. Petals 5. Berry below, 5-seeded.

SPECIFIC CHARACTER.

Mespilus foliis utrinque pubescentibus, pinnatifidis; laciniis incisis.	Mespilus with leaves downy on both sides, and wing-cleft; with the segments slit.

REFERENCE TO THE PLATE.

1. The empalement and pointals.
2. A branch of ripe fruit.

For this undescribed species of Mespilus we are indebted to the Right Hon. the Marquis of Bath, who first observed it to be distinct from the Mespilus tanacetifolia, with which it has commonly been confounded, and pointed out the specific differences to Mr. Lambert in 1807. The accuracy of his Lordship's observations we have often verified this summer in the different collections about London, and find the two species quite distinct in fruit, foliage, and bracteæ. Mespilus odoratissima forms handsome dwarf trees, from 6 to 12 feet high in the specimens we have seen. The blossoms appear in June, and are remarkably fragrant, but considerably smaller than in M. tanacetifolia; but this is abundantly compensated by the livelier colour and greater profusion of the fruit with which the boughs are loaded in autumn. The tree called by Professor Pallas Cratægus orientalis, (see the English translation of his Travels in the Crimea, vol. ii. p. 174 and 181,) and which he found cultivated for its fruit in the south-western parts of the Crimea, where it also grows wild on the mountains, is this species, as we have ascertained from his Herbarium; and the little red Medlar found in Anatolia by Tournefort, (see his Travels, vol. ii. p. 322 of the English translation,) noticed by Dr. Smith in his Exotic Botany, is probably the same thing. We were favoured with the specimens both of this and M. tanacetifolia (our next plate) by the Right Hon. the Marchioness of Bath, from Longleat.

Pl. 3.

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Mespilus, ederatefolia

PLATE DXCI.

MESPILUS TANACETIFOLIA.

Tansy-leaved Medlar.

CLASS XII. ORDER V.

ICOSANDRIA PENTAGYNIA. Twenty Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Petala 5. Bacca infera, 5-sperma.	Calyx 5-cleft. Petals 5. Berry below, 5-seeded.

SPECIFIC CHARACTER.

Mespilus floribus bracteatis; foliis pinnatifidis; laciniis argutè serratis, pubescentibus.	Mespilus with bracts to the flowers; the leaves wing-cleft, with the divisions sawed and downy.

REFERENCE TO THE PLATE.

1. The empalement and pointals.
2. A branch with ripe fruit.

Neither is this species enumerated in the works of Linnæus. The great French botanist Tournefort, who discovered it on the mountains of Anatolia in 1701, thus describes it: "These mountains produce a fine sort of Azarolier or Medlar-tree; there are some as big as oaks. Their trunk is covered with a cleft grayish bark; the branches are bushy, and spreading out on the sides; the leaves are in bunches two inches and a half long, fifteen lines broad, shining, a little hairy on both sides, commonly divided into three parts even to the rib, and these parts indented very neatly on the edges, pretty much like the leaves of tansy; the part at the end of the leaf is again divided into three parts. The fruit grow two or three together at the end of the young shoots, and resemble small apples of an inch diameter with five roundings like the ribs of a melon, a little hairy, pale green inclining to a yellow, with a navel raised of five leaves. We sometimes find one or two of these leaves growing out of the flesh of the fruit, or its stalk. The fruit though agreeable is not so pleasant as our Medlar, but I believe it would be excellent if it were cultivated. The Armenians not only eat as much of this as they can, but likewise fill their bags. The short period the tree has been introduced (not above 20 years, as we are informed) will not allow any in England, as yet, to have reached the size above mentioned; and we much doubt whether it may be thought worthy of cultivation here for the fruit: but the beauty of the tree and agreeable fragrance of the blossoms sufficiently recommend it to a place in the pleasure-garden. This and the last described species with the artificial characters of the genus Mespilus have all the natural habits of Cratægus, and show how ill even our most admired systems are calculated to trace and mark these fine gradations, which, while they yet distinguish, closely connect all nature. Too often the hue and cry of "Heretics! Innovators!" thundered out by the schools against all who will not implicitly follow their dogmas, drive the calm and unprejudiced students of nature out of the field. Yet he that discovers one new truth is surely a benefactor to society; but he that defends and inculcates error is a tyrant in the kingdom of Nature.

2.

Mespilus, tanacetifolia

PLATE DXCII.

MIMOSA GRANDIFLORA.

Great-flowered Mimosa.

CLASS XXIII. ORDER I.

POLYGAMIA MONOECIA. Flowers Male, Female, and Hermaphrodite, on the same Plant.

ESSENTIAL GENERIC CHARACTER.

HERMAPHRODITI. Calyx 5-dentatus. Corolla 5-fida vel 5-petala. Stamina 4—200. Pistillum 1. Legumen bivalve.	HERMAPHRODITES. Cup 5-toothed. Blossom 5-cleft or 5-petalled. Chives 4 to 200. Shaft 1. Pod two-valved.
MASCULI. Calyx 5-dentatus. Corolla 5-fida seu 5-petala. Stamina 4—200.	MALE FLOWERS. Cup 5-toothed. Blossom 5-cleft, or of 5 petals. Chives 4 to 200.

SPECIFIC CHARACTER.

MIMOSA inermis, foliis bipinnatis, multijugis, ciliatis; racemo composito terminali.	MIMOSA unarmed, with doubly-winged leaves in many pairs and ciliated, and flowers in a compound terminating bunch.
Acacia grandiflora. *Willd. Sp. Pl.* 4. *p.* 1074.	

REFERENCE TO THE PLATE.

1. The empalement.
2. The chives spread open.
3. The pointal.

THIS species, conspicuous by its tall woody stems, large purple blossoms, and delicate foliage, was brought to the Royal Gardens at Kew from India by Mrs. Norman, about the year 1769. It is a plant of quick growth, and blossoms freely, but has never produced any pods in this country. The only figure of it we have seen is that by Reinagle in Dr. Thornton's Illustration of the System of Linnæus. A plate however was finished for L'Heritier, who first described it; but his death prevented its publication. The stamens (as in many other Mimosas) are united near the base. The blossoms open in succession from the bottom of the bunch upwards, and continue great part of the summer. The leaves are deciduous. The specimen was communicated from Boyton by A. B. Lambert, esq. in August.

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PLATE DXCIII.

CROTALARIA TETRAGONA.

Four-sided Crotalaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Stamens.

ESSENTIAL GENERIC CHARACTER.

Legumen pedicellatum, turgidum. Stamina omnia connexa.	Pod on a stalk, swollen. Stamens all connected.

SPECIFIC CHARACTER.

Crotalaria caule tetragono, strigoso; petiolis brevibus, foliis oblongo-lanceolatis, acuminatis; stipulis caulem amplexantibus.	Crotalaria with the stem 4-sided, with flat pressed hairs: short footstalks: leaves oblong-lanced, and pointed: stipules embracing the stem.

REFERENCE TO THE PLATE.

1. The keel.
2. The chives and pointal.
3. Seed-bud and pointal.

This new and very ornamental species is remarkable for having the under lip of the calyx often undivided, and every part of the plant up to the blossom covered with shining close-pressed hairs: nor are they entirely wanting on the blossom; on the lower part of the keel they are very conspicuous, hanging downwards like a little beard. A groove with a fringe on each side runs also along the upper side of the style towards the summit. Two thread-shaped silky stipules rise at the base of every leaf-stalk, and, being reflected backwards, closely embrace the stem. A solitary stipule also rises at the base of each flower-stalk, and two where it unites with the calyx: but these, from their singular situation, must perhaps be considered as bracteæ.

We were favoured with the specimens in November from Lord Valentia's gardens at Arley, along with the Plectranthus barbata. His Lordship received the seeds last year from Dr. Roxburgh in India, by the name of Crotalaria tetragona. The plant appears to be shrubby. No account of the species has before been published. Its place in the genus is near to the Crotalaria juncea figured in our sixth volume.

Crotolaria. tetragona

PLATE DXCIV.

PLECTRANTHUS BARBATUS.

Bearded Plectranthus.

CLASS XIV. ORDER I.

DIDYNAMIA GYMNOSPERMIA. Four unequal Stamens. Naked Seeds.

ESSENTIAL GENERIC CHARACTER.

Calyx laciniâ summâ majore. Corolla resupinata, ringens; tubo sursùm gibbo vel calcarato.	Cup with the upper division largest. Blossom lying on its back, gaping; tube with a spur above or swelled out.

SPECIFIC CHARACTER.

Plectranthus racemis bracteatis, bracteis deciduis; foliis ovatis, crenatis, pubescentibus, rugosis, per petiolos decurrentibus: corollæ labio superiore emarginato brevissimo; inferiore subovato, concavo, hirsuto.	Plectranthus with bracts to the bunches, bracts falling off: the leaves oval, scolloped, downy and wrinkled, running down the footstalks; the upper lip of the blossom short, and slightly notched; the lower nearly ovate, compressed and hairy.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom with the segments cut off to expose the chives.
3. The seed-bud and pointal, summit magnified.

The stem of Plectranthus is four-sided with blunt corners, and woolly. The leaves are fleshy, minutely dotted on both sides, and border their footstalks down to the stem. The flower-stalks, the lower part of the cups, and under lip of the blossom, are set with stiff clear bristles. The tube of the blossom is without a spur, and swelled on the upper side. Every part of the plant has a powerful fragrance. The specimens were communicated in November by Mr. Giddings, gardener to Lord Valentia at Arley; with a letter stating, that he raised the plants from Abyssinian seeds sent home by his Lordship about four years ago, and that they grow at Arley to about two feet in height, and thrive with the common treatment of stove plants.

The first species known of this genus, Plectranthus punctatus, the Ocymum punctatum of Linnæus, was also brought from Abyssinia by the celebrated Bruce.

Plectranthus, barbatus

PLATE DXCV.

PANAX FRUTICOSUM.

Shrubby Panax.

CLASS XXIII. ORDER II.

POLYGAMIA DIŒCIA. Flowers Male, Female, and Hermaphrodite on different Plants.

ESSENTIAL GENERIC CHARACTER.

HERMAPHRODITUS. Umbella. Calyx 5-dentatus, superus. Corolla 5-petala. Stamina 5. Styli 2 vel 3, sæpe cohærentes. Bacca 2- vel 3-sperma, infera.	HERMAPHRODITE. An umbel. Cup 5-toothed, above. Blossom 5-petalled. Stamens 5. Shafts 2 or 3, sometimes cohering. Berry 2- or 3-seeded, below.

The male or female flowers we have never seen.

SPECIFIC CHARACTER.

PANAX foliis supradecompositis, dentato-ciliatis; caule fruticoso. *Willd. Sp. Pl.*	PANAX with leaves more than doubly compound, ciliated with little teeth; the stem shrubby.

REFERENCE TO THE PLATE.

1. Empalement, chives, and pointals.
2. The pointals.
3. The plant in miniature.

On examining the flowers of this curious and rare species of Panax, we were a little startled to find how widely they differed from the character of the genus; being trigynous, and the berry three-seeded. Professor Jacquin has also observed the same variation in the flowers of P. aculeatum (see his Icones, tab. 634); and fifty years ago Trew observed and delineated the same number of styles in Panax trifolium, one of the original species upon which the genus was established. Nor had this escaped the scrutinizing eye of that profound observer of nature Bernard Jussieu. From these authorities, therefore, in consonance with our own observations, we have enlarged the character of the genus to include the species. Panax fruticosum, as we learn from Rumphius's Herbarium Amboinense, vol. iv. p. 78 and 79, rises to between five and six feet in height, with a stem as thick as a man's arm, and grows naturally in the Island of Ternate, where it is also much cultivated by the natives for food, medicine, and œconomy; being planted to separate the areas of their gardens and mark the boundaries of their fields. The boiled leaves are eaten as greens, and a decoction both of the leaves and root is used successfully in nephritic diseases, for which they also sometimes prescribe the roots to be eaten raw. The fame of the plant as a powerful diuretic is also great in Amboyna; where, as well as in Ternate, it is commonly planted both for ornament and use. Labillardiere, the French botanist, who accompanied the expedition that sailed in quest of the unfortunate Lapeyrouse, informs us (in his account of the voyage) that when at Amboyna he found this plant encircling the tomb of the venerable Rumphius, its first describer.

Nature he loved; with her he spent his hours:
The grateful goddess wreathes his tomb with flowers!

The famous *Gin-seng*, to which the Chinese attribute such extraordinary virtues, and which, as Osbeck informs us, was commonly sold in their shops in 1751 (see his Travels, English edit. p. 222) for from 30 to 40 times its weight in silver, and which one of their Emperors, 40 years before that, sent 10,000 Tartars in quest of at once, is said by that author to be a species of Panax; but the plant is yet unknown in Europe. Panax fruticosum, we are informed, was introduced to this country about the year 1800, and requires to be kept in the hot-house. The specimen was communicated from Boyton by A. B. Lambert, esq.

naxfruticosum

PLATE DXCVI.

LAURUS CINNAMOMUM.

Cinnamon Tree.

CLASS IX. ORDER I. OR CLASS XXII. ORDER VII.

ENNEANDRIA MONOGYNIA, or *DIŒCIA POLYANDRIA.* Nine Stamens. One Style, or Male and Female Flowers on different Plants. Stamens more than Seven.

ESSENTIAL GENERIC CHARACTER.

CALYX nullus. Corolla 6-partita, glandulis tribus germen cingentibus. Filamenta interiora glandulifera. Drupa 1-sperma.

CUP none. Blossom 6-parted. Glands three, surrounding the germen. Inner filaments bearing glands. Berry dry, one-seeded.

SPECIFIC CHARACTER.

LAURUS foliis trinerviis ovato-oblongis, nervis versus apicem evanescentibus. *Willdenow, Sp. Pl. vol. 2. p. 477.*

LEAVES three nerved, oval-oblong, nerves vanishing towards the point of the leaf.

REFERENCE TO THE PLATE.

1. A flower spread open, shown from the outer side.
2. The same shown from the inner side.
3. The pointal.

FOR the first tolerable figure of the Cinnamon tree we are indebted to Dr. Hermann, Professor of Botany at Leyden, who had also the honour of introducing it to Europe, having brought living plants with him, on his return from Ceylon, which vegetated in the Leyden Academy's garden, and in the gardens of Mynheers Benting and Beverning between two and three years, until a severe winter destroyed them. See his Catalogue of the Plants in the Leyden Garden (Horti Academici Lugduno-Batavi Catalogus), page 130, plates 665 and 666. This fact is the more curious, as Linnæus, describing the Cinnamon from dried specimens in his noble patron Clifford's collection, fifty years after, speaks of it as a plant forbidden to our shores; which Europe had never seen alive, and could hardly hope to see, or to retain even if it could be procured.

The Cinnamon was first cultivated in England by Mr. Miller in the Apothecaries' garden at Chelsea about the year 1768; who probably received it from Holland, the Spice plantations at that time being entirely in the hands of the Dutch. No figure of it has before been published in this country, nor any account of its flowering. It grows naturally in the Island of Ceylon, from whence the vast quantity annually imported into Europe is supplied. The following method of procuring and preparing the bark is abridged from Thunberg's Travels. Proper trees being selected, that is, those that are neither too young nor too old, the branches of three years growth are cut off with a pruning-knife, and their green outer bark scraped off with a crooked knife. The remaining bark is then ripped up lengthwise and peeled off; and the smaller pieces being drawn into the larger, they are laid in the sun to dry. After being sufficiently dried, they are tied up in bundles of about 30 pounds weight each, and brought to the Company's storehouses, where inspectors appointed for that purpose examine every bundle by tasting of it; and on its being approved of, it is tied in bundles of about 85 pounds weight each, which are then sewed into double woollen sacks, over which black pepper is strewed to attract any remaining moisture, and in this state shipped for Europe. From the dust and fragments remaining in the warehouses the extremely valuable and rare oil of Cinnamon is distilled. An oil is also distilled from the leaves, another from the fruit, and a fourth from the bark of the root.

Cinnamon is also found wild in the woods of Martinico, according to Professor Jacquin; but the Ceylon Cinnamon is always considered the best.

We are informed by our friend Mr. Anderson, that a Cinnamon tree in the garden of the Bishop of Winchester at Farnham Castle (perhaps the finest in England) has for many years blossomed and ripened its fruit annually, and that great numbers of young trees have been raised from the fruit, which have far surpassed for healthiness and hardiness the plants commonly obtained from layers, or those imported; and which leads us to hope that the Cinnamon trees may soon become more common and less difficult of cultivation: and his lordship's great success with it will, we hope, serve to stimulate others. We have also seen a drawing in Mr. Lambert's collection, taken in the Bishop of Durham's garden at Mongewell, where it flowered, as we are informed by his lordship, in February 1796.

The Cinnamon tree requires to be kept in the bark-bed in the stove, and is propagated by cuttings and layers.

Our drawing was made in the month of February at J. Knight's nursery, King's Road, from a fine plant upwards of three feet high.

PLATE DCXVII.

TROPÆOLUM PEREGRINUM.

The Little Bird Plant.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Stamens. One Style.

ESSENTIAL GENERIC CHARACTER.

CALYX monophyllus, calcaratus, quinquefidus. Petala duo ad quinque. Stigma trifidum, seu stigmata tria. Drupæ tres, siccæ, et monospermæ.

CUP of one leaf with a spur five-cleft. Petals two to five. Summits three, or summit three-cleft. Berries three, dry, and one-seeded.

SPECIFIC CHARACTER.

TROPÆOLUM petalis serrato-incisis, duobus maximis, tribus minimis. *Jacq. Hort. Schœnb.* 1. *p.* 51. *tab.* 98.

TROPÆOLUM with the petals tooth-gashed, two much larger than the rest; three very small.

REFERENCE TO THE PLATE.

1. Chives and pointal.
2. Seed-bud and pointal, summit magnified.

THE Tropæolum peregrinum grows naturally in Peru, and was gathered wild by the French naturalist Feuillée near the town of Lima. The native name, according to that author, is Malla; the Spaniards call it Paxarito, which signifies a little bird; from the resemblance the expanded blossoms have to little humming-birds flying. Attaching itself by the long footstalks of the leaves to the branches, the plant often ascends to the very summits of trees in its native soil; and Professor Jacquin, director of the Emperor of Germany's gardens at Schœnbrunn, informs us (in the work above quoted) that it grew there in the open ground to twenty-six feet in length, with a stem of a finger's thickness, and a great many branches, but produced no flowers until transplanted into the green-house. A. B. Lambert, esq. who communicated the specimen from his gardens at Boyton last November, informs us that he cultivated it in a three-light melon-frame, which it completely filled, branching in all directions, and producing almost innumerable blossoms. The seeds but rarely ripen in this country, and are generally imported from Spain or Portugal. The plant, however, may be propagated by cuttings. Besides the five species of Tropæolum enumerated in the edition of the Species Plantarum by Willdenow, and the new species in our last volume (T. pennatum), three more species are described and figured in the Flora Peruviana of Ruiz and Pavon; some of which, and others of the many beautiful flowers of that country, the great intercourse now carried on with South America gives us to hope that we may soon see. One of the species in the Flora Peruviana having only two petals, has obliged us to make a little alteration in the generic character.

Tropæolum, peregrinum

PLATE DXCVIII.

BÆCKIA VIRGATA.

Twiggy Bœckia.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-dentatus. Corolla 5-petala. Capsula 3- seu 4-locularis, polysperma, calyce tecta.	Cup 5-toothed. Blossom of 5 petals. Fruit 3- or 4-celled, many-seeded, covered by the cup.

SPECIFIC CHARACTER.

Bæckia foliis lineari-lanceolatis pellucido-punctatis, pedunculis axillaribus umbelliferis.	Bæckia with linear-lanced leaves with transparent dots; the flowerstalks axillary, and bearing umbels.

Leptospermum virgatum. *Forster.*

REFERENCE TO THE PLATE.

1. A petal.
2. The chives and pointal.
3. The same shown from the under side.

In the Island of New Caledonia, celebrated by Captain Cook (above all others) for the courteous, friendly, and honest disposition of the men, and the inflexible virtue of the females, (see his Second Voyage, vol. ii. p. 105 to 127.) and whence every day brought them something new in natural history, this plant with many others was discovered by the two Forsters, who accompanied him as naturalists, and is published in their Genera of Plants gathered in the Islands of the South Seas as a species of Leptospermum. Dr. Smith, however, justly observes, that neither the number of stamens, the fruit, nor the opposite leaves, agree at all with that genus, but most naturally with the Linnean genus Bæckia, of which several species have lately been found in New Holland. The stamens vary from eight to ten; the germen three-celled, with about sixteen seeds in each; but how many of these ripen we have had no opportunity of observing. The leaves are not absolutely without nerves, as described by Forster; we find them faintly three-nerved in his own specimen, but they are more conspicuously so after they become dry, particularly on the under side. In the specimens with which we have been favoured by Mr. Milne from Fonthill, the leaves are a little smaller than those upon the original specimen, which may be occasioned by this plant's being yet so young, being raised only three years ago in the collection of the Marquis of Bath. The time of flowering is October. The Leptospermum virgatum of Willdenow we cannot quote, his descriptions being from two plants of very different genera jumbled together into one species.

In the 277th Number of The Botanical Magazine the writer, endeavouring to destroy the authority of the figure of Yucca gloriosa in The Botanist's Repository, vol. vii., and establish that of his own as the first, says that our figure cannot belong to that plant, in which "the trunk reaches only from six inches to two feet (Miller says in his Dictionary, from two feet and a half to three feet!) in height, and where the leaves are quite entire; but to Y. aloifolia, whose trunk reaches from 6 to 10 feet in height, and the leaves have a finely crenulate edging." Our drawing was taken at Lord Boston's from a plant only ten feet high, the stem little more than three, and the leaves not in the least crenated! The panicle in our figure is also said to be much closer than in that, with its branches likewise more lax and drooping. With all these contradictory qualities, however, it very much resembles Barreliere's figure of the same, which the writer himself has quoted, and in which the curvature of the buds, which he holds to be so extraordinary, is also conspicuous. No less curious is his objection to the tinge of purple on the flowers. Could it be possible that he had not seen either the plant that he was describing or the drawing of it? (See the figure in The Botanical Magazine.) But we leave the Yuccas to speak for themselves. The filamentosa he has also complimented with five feet of a stem (Botanical Magazine, No. 900), and quoted Michaux's authority for it, although that author expressly says that it is stemless!

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Backia, virgata

PLATE DXCIX.

CHAMÆROPS HUMILIS.

Dwarf Fan-Palm.

CLASS XXIII. ORDER II.

POLYGAMIA DIŒCIA. Stamens and Pointals on different Plants, with some perfect Flowers occasionally.

GENERIC CHARACTER.

MASC. Calyx 3-partitus. Corolla 3-petala. Stamina 6.

HERMAPH. Calyx, corolla et stamina ut in masculis. Styli 3. Drupæ 3, monospermæ.

MALES. Cup 3-parted. Blossom 3-petalled. Stamens 6.

HERMAPHRODITES. Cup, blossom and stamens as in the males. Styles 3. Berries 3, dry, one-seeded.

SPECIFIC CHARACTER.

CHAMÆROPS frondibus palmatis, stipitibus spinosis, spathâ simplici. *Willd. Sp. Pl.* 4. *p.* 1154.

CHAMÆROPS with palmate boughs, prickly footstalks, and simple sheaths.

REFERENCE TO THE PLATE.

1. Empalement and blossom.
2. The same shown from the outer side.
3. The chives.

THE Dwarf Fan-Palm is the only species indigenous to Europe, where it grows naturally in Italy on the coast of Etruria, in the Island of Sicily, and in Spain in the province of Valencia, where we are informed by Cavanilles, in his Icones Plantarum, (vol. ii. p. 12.) it is most commonly found stemless, and in that tract called Desierto de las Palmas, or the Desert of Palms, with stems rarely exceeding two feet in height. In the district of Xabea, however, on the coast of the Mediterranean, he found many with stems fourteen feet high, and one as high as thirty feet. The same author informs us that the lower part of the stem, which enters the earth, and the heads of young blossoms before they burst from the sheath, are eaten by the Spaniards, to whom also the leaves are of the greatest utility, furnishing them with mats, ropes, brooms, and baskets, in the manufacture of which boys are principally employed, and women during the evenings in winter. Many of our fair countrywomen, we fear, spend their evenings less usefully. Professor Pontedera, in his Anthologia, published at Padua in 1720, has given three good plates of the Chamærops and its fructification, taken from a plant, the stem of which was twelve feet high, growing in the public garden there. From this author we learn that the young shoots or suckers from the bottom of the plant (called there cefaglioni) are eaten by the Italians. The Chamærops also grows spontaneously upon uncultivated hills on the coast of Barbary, where the lower part of the young stems and the roots are also eaten by the Moors; and the leaves, after being macerated in water, made into mats, ropes, baskets, &c., as in Spain. (See Desfontaines' Flora Atlantica, vol. iii. p. 473.) Willdenow takes notice of two varieties of the Chamærops, one of which is nearly stemless, and the other twenty feet in height; and the former of which is probably that cultivated in England, as we have never met with any of a large size, although the plant has been in our gardens since the year 1731; while that in the Jardin des Plantes at Paris, (nearly twenty feet high,) mentioned by the Chevalier Lamarck in the Encyclopédie Méthodique, seems to be the second variety. Our drawing was taken early in March, in Malcolm's Nursery at Kensington, from a male plant about two feet in height with three fine bunches of male blossoms.

PLATE DC.

GÆRTNERA RACEMOSA.

Racemed Gærtnera.

CLASS X. ORDER I.

DECANDRIA MONO-DI-TRIGYNIA. Ten Chives. One to Three Pointals.

GENERIC CHARACTER.

Calyx 5-partitus. Petala 5 lacero-ciliata, inæqualia. Stamina decem, unicum reliquis longius. Stylus incurvus. Stigma simplex. Germen triloculare, 3-spermum. Samara inæqualiter quadrialata, monosperma.

Cup five-parted. Petals five, cut-fringed, unequal. Stamens ten, one longer than the rest. Style incurved. Summit simple. Seed-bud of three cells with three seeds. Fruit with four unequal wings, one-seeded.

REFERENCE TO THE PLATE.

1. The empalement.
2. The same shown from the outer side.
3. The chives and pointals.
4. The seed-bud and pointals.
5. The capsule.

This curious and interesting plant, originally considered as a species of Banisteria by Linnæus, was very properly separated and named in honour of the celebrated Gærtner by Schreber in his Genera Plantarum; and Cavanilles nearly about the same time published it in his Ninth Dissertation, under the name of Molina, in honour of the author of the Natural History of Chili. Gærtnera however has the right of priority, and has been continued by Dr. Roxburgh in his Plants of the Coast of Coromandel, where he has given a figure and description of the plant, (vol. i. p. 19. tab. 18.) and by Willdenow in his edition of the Species Plantarum.

On examining the fructification, we have found the plant more closely allied to Banisteria than has hitherto been suspected, the styles being commonly two with a rudiment of a third, and the germen three-locular with a young seed in each cell; but the inequality of the petals and stamens, the solitary gland on the calyx, and the abortion of the lateral seeds, furnish abundant distinctions.

From the Coromandel plants above quoted we learn that it is a large climbing shrub, growing naturally on the Circar mountains in India, and is commonly cultivated all over that coast on account of the beauty and fragrance of its flowers, which open there during the rainy season. According to Linnæus it is also a native of the Island of Ceylon. No other species of the genus has yet been described. The plant is certainly a great acquisition to our collections, and was introduced from India by the late Lady Amelia Hume about the year 1805. Our specimen was communicated from the collection at Wormley Bury the end of last March.

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Gertnera, racemosa

PLATE DCI.

CROTALARIA PULCHRA.

Fair Crotalaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Stamens.

GENERIC CHARACTER.

LEGUMEN pedicellatum, turgidum. Filamenta connata cum figurâ dorsali.

POD on a footstalk, swollen. Filaments united into a tube, which is cleft at the back.

SPECIFIC CHARACTER.

CROTALARIA caule hirsuto; foliis simplicibus, elliptico-obovatis, integerrimis, sericeis, nitentibus; leguminibus calyce tectis bracteisque strigoso-sericeis.

CROTALARIA with a hairy stem; simple, elliptical, inversely oval, entire, silky, shining leaves: the pods, the calyx which covers them, and the bracts, all shining with silky hairs.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. Chives and pointal.
6. The seed-bud and pointal.

THE choice collection of the late Lady Amelia Hume, at Wormley-bury, Herts, which before furnished us with the magnificent and unrivalled Pæonia papaveracea, has again produced us this new species of Crotalaria, seeds of which were received by her ladyship, about the year 1807, from the East Indies, under the name of C. pulcherrima, which we have abridged to pulchra, as we can hardly presume to say which species is most beautiful before we have seen the whole genus, which, from the large catalogue of Indian species by Dr. Roxburgh in his unpublished Indian Flora, a copy of which we have seen in the collection of A. B. Lambert, esq. (besides the forty-four species already published by Willdenow) we think is not soon likely to happen.

Crotalaria pulchra is as yet in very few collections in this country, nor have we heard of its blossoming in any other collection. The foreign specimens which we have seen with the Catalogue above mentioned in the same collection have very large spreading bunches of flowers, and there can be no doubt but the plants in this country, when a little stronger, will blossom with equal profusion. The plant is a native of the Mysore country in the East Indies. We received the specimen in the middle of March last.

Crotolaria. pulchra

PLATE DCII.

GLYCINE COMPTONIANA.

Comptonian Glycine.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

GENERIC CHARACTER.

CALYX bilabiatus. Corollæ carina apice vexillum reflectens.

CUP two-lipped. Keel of the blossom turning back the standard at the end.

SPECIFIC CHARACTER.

GLYCINE volubilis, foliis ternatis elongato-ovatis utrinque glabris, petiolis partialibus supra pubescentibus, racemis axillaribus multifloris.

GLYCINE twining; the leaves by threes of a long egg-shape, smooth on both sides; the partial footstalks hairy above; the bunches lateral and many-flowered.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. Chives and pointal.
6. The seed-bud and pointal.

THIS elegant species is a native of New Holland, and belongs to that division of the genus with many-seeded pods without any partitions. We find in the germen the rudiments of eight kidneyshaped seeds, but the ripe fruit we have not seen. Having found no antecedent description or figure of the plant, we have named it in honour of Lady Northampton, in whose collection at Castle Ashby it flowered last April. But by whom it was introduced we are uncertain.

Glycine Camptoniana

PLATE DCIII.

COMMERSONIA DASYPHYLLA.

Hairy-leaved Commersonia.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

GENERIC CHARACTER.

CALYX monophyllus 5-partitus. Petala 5 linearia basi sublobata, apice inflexa. Nectarium 5-partitum. Filamenta ad basin petalorum, brevissima. Germen subglobosum. Styli erecti. Stigmata capitata. Capsula dura, setosa, 5-locularis, 5-valvis, loculis 2—4-spermis.

EMPALEMENT of one leaf 5-parted: Petals 5, linear, commonly lobed at the base, turned in at the point. Nectary 5-parted. Threads at the base of the petals, very short. Seed-bud nearly round. Styles erect with their summits headed. Capsule hard, bristly, with 5 cells and 5 valves, the cells from 2- to 4-seeded.

SPECIFIC CHARACTER.

COMMERSONIA foliis elongato-cordatis inæqualiter serratis supra subtusque hirsutis.

COMMERSONIA with long heart-shaped unequally toothed leaves hairy on both sides.

REFERENCE TO THE PLATE.

1. Empalement, chives and pointals, magnified.

COMMERSONIA dasyphylla is a low branching shrub, a native of New Holland or Van Diemen's Land, and is remarkable for a powerful odour of cucumbers which it emits when in blossom, and even retains for some time after it is dried. Being a plant which blossoms freely in early spring, and of very easy culture, it well deserves a place in the green-house or conservatory, Only one species of Commersonia has before flowered in England, the C. echinata of our last volume (Plate 519), but which has since been discovered to be a different species from the original C. echinata of Forster; which error we take the present opportunity of correcting, and beg of our readers to erase the name echinata in our 519th plate and description, and substitute platyphylla, with the following specific description:

COMMERSONIA platyphylla, foliis elongato-cordatis dentatis, supra stellato-hispidulis, subtus hirsutis, mollibus.

BROAD-LEAVED Commersonia with toothed leaves of a long heart-shape, a little rough with star-like bristles on the upper side; hairy and soft below.

Another nondescript Commersonia from Van Diemen's Land is now in our gardens, but has not yet blossomed; and we have seen dried specimens of a fifth species brought from New Holland by the late Governor King, in the collection of A. B. Lambert, esq.

We were favoured with the specimen of C. dasyphylla by Mr. Milne, from Fonthill, last April. The plant is at present in very few collections, and has not, we believe, yet blossomed any where else in England.

Commersonia dasyphilla

PLATE DCIV.

MALPIGHIA POLYSTACHIA.

Branching Malpighia.

CLASS X. ORDER I. TO III.

DECANDRIA MONO-DI-TRIGYNIA. Ten Chives. One to Three Pointals.

GENERIC CHARACTER.

CALYX 5-phyllus basi extus poris binis melliferis. Petala 5 subrotunda, unguiculata. Filamenta basi cohærentia. Drupa 1-locularis tripyrena, nucibus monospermis.

CUP 5-leaved with two honey-bearing pores on the outside at the base. Petals five, nearly round with claws. Threads cohering at the base. Berry fleshy of one cell with three large bony seeds.

SPECIFIC CHARACTER.

MALPIGHIA foliis lanceolato-ovatis integerrimis glabris nitidis, subtus prope basin biglandulosis; racemis axillaribus et terminalibus; pedicellis uniglandulosis; floribus monogynis; stigmate capitato.

MALPIGHIA with lance-ovate, entire smooth shining leaves, with two glands on their underside near the base; bunches both from the sides and tops of the branches; flower-stalks with one gland; style one; stigma headed.

REFERENCE TO THE PLATE.

1. The empalement.
3. The chives spread open.
3. Seed-bud and pointals.

THIS splendid Malpighia is one of that fine collection of West Indian and American plants (we have before mentioned) made by Lord Seaforth when Governor of Barbadoes, and brought home with him on his return to England. From the catalogue of the collection we learn that the plant is a native of Trinidad, and his Lordship informs us that it was sent to him from that island by Mr. Thompson.

The species ought to be arranged between the M. nitida of Linnæus and M. glandulosa of Cavanilles, from both of which the glands on the leaf and solitary gland on the pedicel easily distinguish it. In the last circumstance, however, it agrees with the M. glandulosa of Jacquin, (see his Icones, tab. 469.) but is totally different both in the flowers and foliage. A. B. Lambert, esq., from whose stove at Boyton we were favoured with the specimen, informs us that it is a shrub of very free growth, throwing out long slender twigs on all sides, and requiring the frequent use of the knife to keep it in due bounds. The bunches of flowers first appeared in November, but did not open until the beginning of April. The leaf-stalks are thinly covered with silky bristles, some of which also appear towards the base of the younger leaves.

Malpighia polystachia.

PLATE DCV.

PELIOSANTHES TETA.

Bengal Peliosanthes, or Teta.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

Calyx nullus. Corolla 6-partita, subrotata, laciniis lato-ovatis obtusis. Nectarium corollâ triplò breviore incumbente, ore angustato integro. Stamina sub ore nectarii affixa. Filamenta subnulla. Stylus crassus, brevis, obtusè trigonus, trisulcatus. Stigma sulculus tripartitus in apice styli. Germen inferum, 3-loculare loculis dispermis. Semina (immatura) obovata, erecta, fundo loculamenti affixa. Fructus bacca? subovata, carnosa.

Cup none. Blossom 6-parted, nearly wheel-shaped, the divisions broadly egg-shaped, blunt. Nectary three times shorter than the blossom, leaning inwards, the mouth narrowed and entire. Stamens affixed under the lip of the nectary. Filaments scarcely any. Pointal fleshy, short, bluntly three-sided, with three furrows. Stigma a little three-branched channel on the top of the pointal. Germ below, of three cells which are two-seeded. Seeds (while young) inversely egg-shaped, erect, and affixed to the bottom of the cells. Fruit a berry? nearly oval, fleshy.

REFERENCE TO THE PLATE.

1. A segment of the flower magnified.
2. Seed-bud and pointal magnified, with the seeds exposed.
3. Seed-bud cut transversely, magnified.

This very curious plant, so distinct from every genus hitherto described, was introduced from the East Indies, at the same time with the Gærtnera figured in our last number, by the late Lady Amelia Hume. The roots are fibrous and perennial, as are also the leaves, which rise from the root upon footstalks embracing one another at the base, and are of a long lance-shape with strong longitudinal nerves, which are transversely interwoven with little branching veins. The flower-stalks are round, rising to from one to two feet in height, with membranaceous bracts scattered at regular distances, and were four in number in the specimen which we have figured. The blossoms grow in a kind of raceme formed of little bunches or tufts of two to four flowers each: the footstalks are of unequal lengths with a joint near the top, and are attended by incurved bracts at the base, the lowermost bract at each tuft being always the largest. The germ is nearly top-shaped, but a little hexangular upwards. Three of the divisions of the blossom are just perceptibly broader than the other three, and both the corolla and nectary are closely pierced with transparent dots hardly visible to the naked eye, but very distinct when magnified.

We have seen a very good coloured drawing of the plant taken in India in the collection of J. Fleming, esq. which represents the fruit (which has not yet ripened in England) as a bluntly oval, fleshy berry, with the seeds in pairs as in the germ. Both this drawing and the plant received from India by Lady Amelia Hume were marked *Teta viridiflora*; Teta being perhaps (if we may hazard a conjecture) the name applied to the plant by the native Indians. However this may be, as it appears to be known in India by that name, we have retained it for the specific designation; applying to the genus, in conformity to the Linnean canons, (from πελιος, lividus, and ανθος, flos,) the name of Peliosanthes. Our drawing represents the original plant imported from India, with which we were favoured by Sir Abraham Hume, bart. last April, through the kindness of A. B. Lambert, esq. who has also informed us, from Dr. Roxburgh's MSS. in his possession, that the plant is found growing naturally about Chittagong in the East Indies. We have just seen two other species of the genus in the curious collection of T. Evans, esq. at Stepney, imported by him last Autumn from Prince of Wales's Island, of which they are natives. One of them has the leaves nearly of a blue colour; and Mr. Evans's collector informs us, that he found five or six species growing naturally in the island above mentioned, although he had not the good fortune to bring them alive to England.

Linnæus was of opinion, that there were not above ten thousand plants in the world; but above five-and-twenty thousand have already been described, and ten thousand probably yet remain to be added to the number!

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Peliosanthes Teta.

PLATE DCVI.

ZIERIA SMITHII.

Smithian Zieria.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

GENERIC CHARACTER.

Calyx quadripartitus. Petala quatuor. Stamina glabra, glandulis insidentia. Stylus simplex. Stigma subquadrilobum. Capsulæ quatuor coalitæ. Semina arillata.

Cup four-parted. Petals four. Chives smooth, sitting on glands. Pointal simple. Summit generally four-lobed. Fruit of four cohering capsules. Seeds covered with an arillus.

REFERENCE TO THE PLATE.

1. Empalement magnified.
2. Chives and pointal.
3. A chive magnified.
4. The same shown from the outer side.
5. Empalement, seed-bud, and pointal magnified.

The Zieria Smithii is a dwarf warty shrub with opposite branches, and leaves which are composed of three lanceolate leaflets, rough with transparent dots, which probably secrete an oil, as the bruised leaves are very fragrant. A few small scattered hairs are just visible on their upper surface. The panicles of flowers rise from the axils of the leaves, which they often excel in length, and branch in the same opposite manner as the stem, with linear bracts at the divisions. The cups are very short, finely haired and dotted as the leaves. The petals are broad-lanced, pointed, and slightly tinged with purple on the outside. The genus was established by Dr. Smith in the fourth volume of the Linnean Society's Transactions, and named in memory of his friend Mr. Zier, whom he calls "an indefatigable botanist, but whose labours generally gained celebrity under another name than his own." Were celebrity only to be gained by real merit, many of the high-sounding names that now swell the trump of fame would, we fear, have far less pretensions than Zier. The Zieria Smithii was communicated last April by A. B. Lambert, esq. from his collection, and we have seen dried specimens of four other species preserved in his Herbarium, all (like the present) natives of New Holland, and agreeing in their shrubby nature, opposite branches, ternate leaves, and axillary bunches of flowers. None of the species have before been published.

Plate

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Tiarella. Smithii

PLATE DCVII.

CLERODENDRUM TOMENTOSUM.

Downy Clerodendrum.

CLASS XII. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

CALYX campanulatus, quinquefidus. Corolla tubo elongato, limbo quinquepartito, æquali. Stamina exserta. Germen quadriloculare, loculis monospermis. Drupa tetrapyrena.

CUP bell-shaped, five-cleft. Tube of the blossom elongated, with the limb equally five-parted. Stamens longer than the tube. Seed-bud four-celled, the cells one-seeded. Fruit a dry berry including four nuts.

SPECIFIC CHARACTER.

CLERODENDRUM tomentosum, foliis ellipticis acutis integris calycibusque tomentosis; corymbis congestis.—*Brown. Prodromus Floræ Novæ Hollandiæ et Insulæ Van Diemen, vol.* 1. *p.* 510.

DOWNY Clerodendrum with elliptic acute entire leaves downy as well as the cups; corymbs crowded.

REFERENCE TO THE PLATE.

1. Empalement.
2. A blossom spread open.
3. Seed-bud and pointal.
4. A ripe fruit.

THE Clerodendrum tomentosum is found naturally growing about Port Jackson and some other parts of the eastern and northern coasts of New Holland, according to Mr. Brown's Prodromus of the Flora of that country, just published. This long expected and interesting work contains descriptions of about two thousand plants, (of which, scarcely a third part have before been published) in the first volume, and the second is now in the press.

Although the Clerodendrum tomentosum has been in England above ten years, no figure of it has before been given in this country. All the plants which we have seen of it form erect shrubs from four to six feet in height. The time of blossoming is March and April. We have been favoured with specimens in blossom from the botanic garden of the Company of Apothecaries at Chelsea, and with the ripe fruit from Sir Abraham Hume's collection at Wormley-bury, but are uncertain who first introduced it.

Clerodendrum, tomentosum

PLATE DCVIII.

CITRUS NOBILIS.

Mandarin Orange.

CLASS XVIII. ORDER III.

POLYADELPHIA ICOSANDRIA. Many Sets of Chives. Threads from the Calyx or Receptacle.

GENERIC CHARACTER.

CALYX 5-dendatus. Corolla 5-petala. Stamina 20 in cylindrum passim connata. Stylus 1. Bacca 9—12-locularis, pulpâ vesiculari.

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CUP five-toothed. Petals five. Stamens about twenty, generally united at the base. Shaft 1. Fruit 9- to 12-celled, the pulp variously divided.

SPECIFIC CHARACTER.

CITRUS petiolis sublinearibus, fructu latescente depresso.

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CITRUS with nearly linear leafstalks; the fruit broad depressed.

CITRUS nobilis, inermis, ramis adscendentibus: petiolis strictis, fructu tuberculoso subcompresso.—*Lour. Flor. Cochinchin.* 2. *p.* 569?

REFERENCE TO THE PLATE.

1. The empalement.
2. Chives and pointal.
3. The chives spread open, a tip magnified.
4. Seed-bud and pointal.
5. A horizontal section of the fruit.

THE drawing of this remarkable Orange, which has so long been a desideratum in this country, was taken at Wormley-bury in the beginning of last May. The plant is a native of China, and Mr. Barrow informs us, that he found the fruit very common when on his travels in that country, and in much higher estimation than the common Orange by the Chinese, who call it Mandarin Orange (answering nearly to the English epithet of noble) by way of pre-eminence. The same gentleman also informs us, that he found some fine trees of it in the gardens at the Cape of Good Hope; it is therefore the more singular that it has been so long in reaching this country. From Loureiro's description of his Citrus nobilis, there can be little doubt of its being intended for the Mandarin Orange; which, he informs us, grows to a moderately sized tree, and particularly notices the superior excellence and the depression of the fruit, whose common size is about five inches across. The plant at Sir Abraham Hume's is as yet only about five feet in height, and was imported from Canton in 1805.

It is easily distinguished from the common Orange, both by its curious form and internal structure, the pulp adhering so loosely to the rind as to be separable from it by the slightest effort, and leaving in many places a considerable opening between them.

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TO THE PLANTS CONTAINED IN VOL. IX.

Plate 553	Lobelia assurgens	Assurgent Lobelia	H. H.	Shrub.	July.
554	Volkameria angustifolia	Narrow-leaved Volkameria	H. H.	Shrub.	August.
555	Zingiber Cliffordiæ	Cliffordian Zingiber	H. H.	Shrub.	September.
556	Pancratium amœnum	Broad-leaved Pancratium	H. H.	Bulb	March.
557	Periploca Africana	African Periploca	G. H.	Shrub.	Sum. & autumn.
558	Ferula Persica	Persian Ferula	Har.	Shrub.	October.
559	Camellia Japonica, *semi-duplex*	Semi-double-flowered Camellia	G. H.	Shrub.	February.
560	Verea acutiflora	Pointed-flowered Verea	H. H.	Shrub.	December.
561	Xeranthemum fragrans	Fragrant Xeranthemum	G. H.	Shrub.	August.
562	Cynanchum bicolor	Two-coloured Cynanchum	H. H.	Shrub.	August.
563	Mimosa elegans	Elegant Mimosa	H. H.	Shrub.	March.
564	Ixia curta	Short Ixia	G. H.	Bulb.	April.
565	Ruta linifolia	Flax-leaved Ruta	Har.	Herb.	Sep. & October.
566	Callicoma serratifolia	Sawed-leaved Callicoma	G. H.	Shrub.	March.
567	Ceratonia siliqua	Pod-bearing Ceratonia	G. H.	Shrub.	February.
568	Liparia sphærica	Round-headed Liparia	G. H.	Shrub.	August.
569	Ceanothus laniger	Woolly Ceanothus	G. H.	Shrub.	April.
570	Justicia nitida	Shining-leaved Justicia	H. H.	Shrub.	August.
571	Sida patens	Spreading Sida	H. H.	Ann.	September.
572	Protea saligna	Willow-leaved Protea	G. H.	Shrub.	August.
573	Magnolia auriculata	Ear-leaved Magnolia	Har.	Shrub.	May.
574	Pultenæa obcordata	Inversely Heart-leaved Pultenæa	G. H.	Shrub.	March.
575	Martynia diandra	Diandrous Martynia	H. H.	Ann.	November.
576	Lithospermum Tinctorium	Dyers' Bugloss	Har.	Herb.	May.
577	Protea virgata	Twiggy Protea	G. H.	Shrub.	August.
578	Ægiphila diffusa	Spreading Ægiphila	H. H.	Shrub.	August.
579	Cratægus Azarolus	The Azarole	Har.	Tree.	May.
580	Mesembyanthemum acinaciforme	Scimitar-leaved Mesembryanthemum	G. H.	Shrub.	August.
581	Salix violacea	Violet-coloured Willow	Har.	Tree.	April.
582	Protea mellifera albiflora	White-flowered Honey-bearing Protea	G. H.	Shrub.	August.
583	Lonicera Japonica	Japanese Woodbine	G. H.	Shrub.	July.
584	Phlomis Samia	Samian Phlomis	Har.	Herb.	July.
585	Sophora Japonica	Japanese Sophora	Har.	Tree.	Autumn.
586	Lilium speciosum	Showy Lily	Har.	Bulb.	All Summer.
587	Corchorus Japonicus, *flore pleno*	Japanese Corchorus with double Flowers	G. H.	Shrub.	Spring & summer.
588	Sida hastata	Halberd-leaved Sida	H. H.	Ann.	September.
589	Gladiolus angustus, *minor*	Small Narrow-leaved Cornflag	G. H.	Herb.	August.
590	Mespilus odoratissima	Sweet-scented Mespilus	Har.	Tree.	September.
591	Mespilus tanacetifolia	Tansy-leaved Medlar	Har.	Tree.	September.
592	Mimosa grandiflora	Great-flowered Mimosa	H. H.	Shrub.	July & August.
593	Crotalaria tetragona	Four-sided Crotalaria	G. H.	Shrub.	November.
594	Plectranthus barbatus	Bearded Plectranthus	H. H.	Ann.	November.
595	Panax fruticosum	Shrubby Panax	H. H.	Shrub.	January.
596	Laurus Cinnamomum	Cinnamon Tree	H. H.	Tree.	February.
597	Tropæolum peregrinum	The Little Bird Plant	H. H.	Ann.	November.
598	Bæckia virgata	Twiggy Bæckia	G. H.	Shrub.	October.
599	Chamærops humilis	Dwarf Fan Palm	H. H.	Shrub.	March.
600	Gærtnera racemosa	Racemed Gærtnera	H. H.	Shrub.	March.
601	Crotalaria pulchra	Fair Crotalaria	G. H.	Shrub.	March
602	Glycine Comptoniana	Comptonian Glycine	G. H.	Shrub.	April.
603	Commersonia dasyphylla	Hairy-leaved Commersonia	H. H.	Shrub.	April.
604	Malpighia polystachia	Branching Malpighia	H. H.	Shrub.	April.
605	Péliosanthes Teta	Bengal Peliosanthes or Teta	H. H.	Shrub.	May.
606	Zieria Smithii	Smithian Zieria	G. H.	Shrub.	May.
607	Clerodendrum tomentosum	Downy Clerodendrum	G. H.	Shrub.	March & April.
608	Citrus nobilis	Mandarin Orange	H. H.	Shrub.	May.

ERRATA.

Plate 586 for Lilium speciosum, read Lilium tigrinum, a perfectly new species, distinct from the references given in the description.

587 In reference to the plate, instead of pointals, read empalement and pointals.